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Water Resources Data for Pennsylvania Water Year 1980. Volume 1. Delaware River Basin

(U.S.) Geological Survey
Harrisburg, PA

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Water Resources Data for Pennsylvania

Volume 1. Delaware River Basin

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT PA-80-1

WATER YEAR 1980

Prepared in cooperation with the Pennsylvania Department of Environmental Resources, the Philadelphia Water Department and with other State, municipal, and Federal agencies

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U.S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VA 22161

CALENDAR FOR WATER YEAR 1980

1979

OCTOBER

S	M	T	W	T	F	S
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1980

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31						

SEPTEMBER

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21	22	23	24	25	26	27
28	29	30				

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Water Resources Data for Pennsylvania

Volume 1. Delaware River Basin

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT PA-80-1

WATER YEAR 1980

Prepared in cooperation with the Pennsylvania
Department of Environmental Resources, the
Philadelphia Water Department and with other
State, municipal, and Federal agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

JAMES G. WATT, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

For additional information write to
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P.O. Box 1107
Harrisburg, Pennsylvania 17108-1107
1981

PREFACE

This report was prepared by personnel of the Pennsylvania District of the Water Resources Division of the U.S. Geological Survey under the supervision of David E. Click, District Chief, and J. E. Biesecker, Regional Hydrologist, Northeastern Region. It was done in cooperation with the State of Pennsylvania and with other agencies.

This report is one of a series issued State by State. General direction for the series is by Philip Cohen, Chief Hydrologist, U.S. Geological Survey, and Robert J. Dingman, Assistant Chief Hydrologist for Scientific Publications and Data Management.

Data for Pennsylvania are in three volumes as follows:

Volume 1. Delaware River Basin
Volume 2. Susquehanna and Potomac River Basins
Volume 3. Ohio River and St. Lawrence River Basins

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Water resources data for the 1980 water year for Pennsylvania consist of records of discharge and water quality of streams; elevation and contents of lakes and reservoirs; and water levels of ground-water wells. This volume contains records for water discharge at 73 gaging stations; elevation and contents at 11 lakes and reservoirs; water quality at 39 gaging stations; and water levels at 16 observation wells. Also included are data for 43 crest-stage, 28 low-flow, and 43 water-quality partial-record stations. Locations of these sites are shown on figures 4 through 7. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. These data together with the data in Volumes 2 and 3 represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State, local, and Federal agencies in Pennsylvania.

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(Letter after station name designates types of data: (d) discharge, (c) chemical, (b) biological, (t) water temperature, (e) elevation, gage height, or contents, (s) sediment

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INTRODUCTION

Water resources data for the 1980 water year for Pennsylvania consist of records of discharge and water quality of streams; elevation and contents of lakes and reservoirs; and water levels of ground-water wells. This volume contains records for water discharge at 73 gaging stations; elevation and contents at 11 lakes and reservoirs; water quality at 39 gaging stations; and water levels at 16 observation wells. Also included are data for 43 crest-stage, 28 low-flow, and 43 water-quality partial-record stations. Locations of these sites are shown on figures 4 through 7. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. These data together with the data in Volumes 2 and 3 represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State, local, and Federal agencies in Pennsylvania.

Records of discharge and stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled, "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled "Ground Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from the Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, Virginia 22202.

For water years 1961 through 1970, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1970 were similarly released either in separate reports or in conjunction with streamflow records.

Beginning with the 1971 water year, water data for streamflow, water quality, and ground water are published in official Survey reports on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report PA-80-3." These water-data reports are for sale, in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the District Chief at the address given on the back of the title page or by telephone (717) 782-3851.

COOPERATION

The U.S. Geological Survey and organizations of the Commonwealth of Pennsylvania have had cooperative agreements for the systematic collection of surface-water records during the periods 1919-21 and 1931 to date, water-quality records from 1944 to date, and ground-water records from 1925 to date. Organizations that supplied data are acknowledged in station descriptions. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

State Department of Environmental Resources, Clifford L. Jones, Secretary, through the following: Office of Resources Management, P. S. Duncan., Deputy Secretary; Office of Environmental Protection and Regulation, W. B. Middendorf, Deputy Secretary; Bureau of Topographic and Geologic Survey, A. A. Socolow, State Geologist.

State Department of Transportation, Thomas Larsen, Secretary, through the Bureau of Materials Testing and Research, L. D. Sandvig, Director.

Delaware River Basin Commission, G. M. Hansler, Executive Director.

Chester County Water Resources Authority, D. C. Yaeck, Executive Director.

City of Easton, H. J. Schultz, Mayor.

City of Bethlehem, P. M. Marcincin, Mayor.

City of Philadelphia, Water Department, W. J. Marrazzo, Water Commissioner.

Delaware Geological Survey, R. R. Jordan, State Geologist.

Warminster Municipal Authority, Joseph Butch, General Manager.

Assistance in the form of funds or services was given by: Corps of Engineers, U.S. Army, in collecting records for 48 gaging stations. Assistance was also furnished by the National Weather Service, NOAA, U.S. Department of Commerce, and the U.S. Environmental Protection Agency.

The following organizations aided in collecting records:

Palmer Water Co.; Pennsylvania Power and Light Co.; Philadelphia Electric Co.; Philadelphia Surburban Water Co.; New Jersey Zinc Co.; Panther Valley Water Co.; and the City of Coatesville.

HYDROLOGIC CONDITIONS

Streamflow during the year was average across the basin. At both representative gaging stations for the Delaware River basin, Bush Kill at Shoemakers, (01439500), and Schuylkill River at Pottstown (01472000), streamflow was 101 percent of the 1941-70 median.

Precipitation for the year was deficient at all index stations. Monthly values at all index stations were at or below normal December through February, May, August, and September, with February values averaging 36 percent of normal. Conversely, monthly values at all index stations were above normal October, March, and April, with March values averaging 170 percent of normal.

Bush Kill at Shoemakers streamflow was below median for the index period 1941-70. January through March and May through September. Streamflow for February, 66 ft^3/s, was the second lowest February mean for the period of record, 1909-80. Yearly mean of 221 ft^3/s was 93 percent of the average for the period 1909-79.

Schuylkill River at Pottstown streamflow was below median for the index period 1941-70 January through March and June through September. Streamflow for February, 834 ft^3/s, was the second lowest February mean for the period of record, 1927-80. Yearly mean of 1,743 ft^3/s was 91 percent of the average for the period 1928-79.

Current water year monthly and yearly means are compared with monthly and yearly medians for the period 1941-70 at the two representative gaging stations in figures 1 and 2.

Ground-water levels in the 1980 water year were at or above their monthly mean, except during February, March, and June through September when they fell below their average.

Ground-water levels in the 1980 water year were at or above those in corresponding months of the 1979 water year from October through December, April, and May. Levels were below corresponding months of the 1979 water year from January through March and June through September of the 1980 water year.

Comparison of 1980 water levels in network observation wells with (a) 1979 water levels and (b) monthly mean water levels for period of record is shown in figure 3.

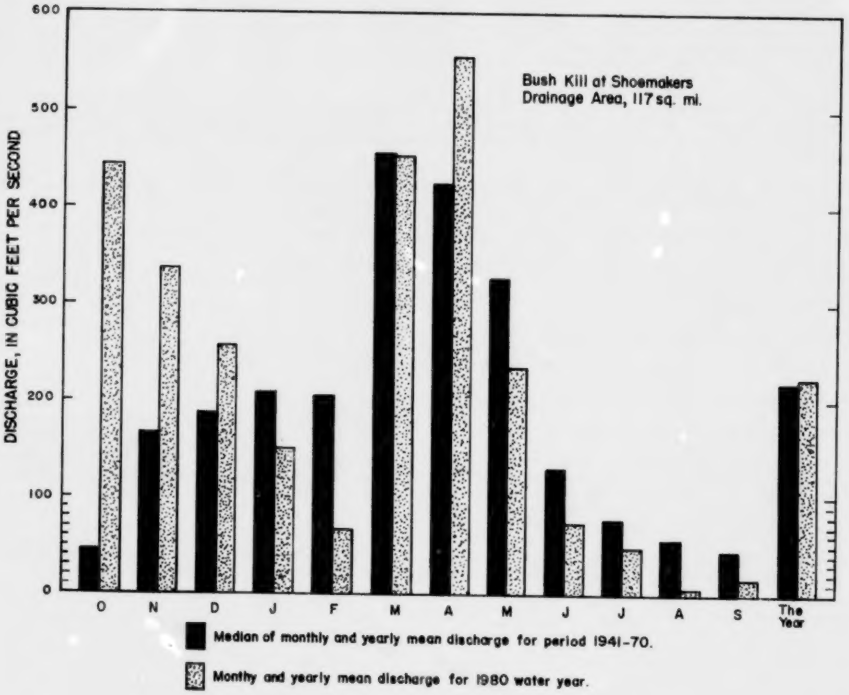

Figure 1.--Comparison of discharge at Bush Kill at Shoemakers during 1980 water year with median discharge for period 1941-70.

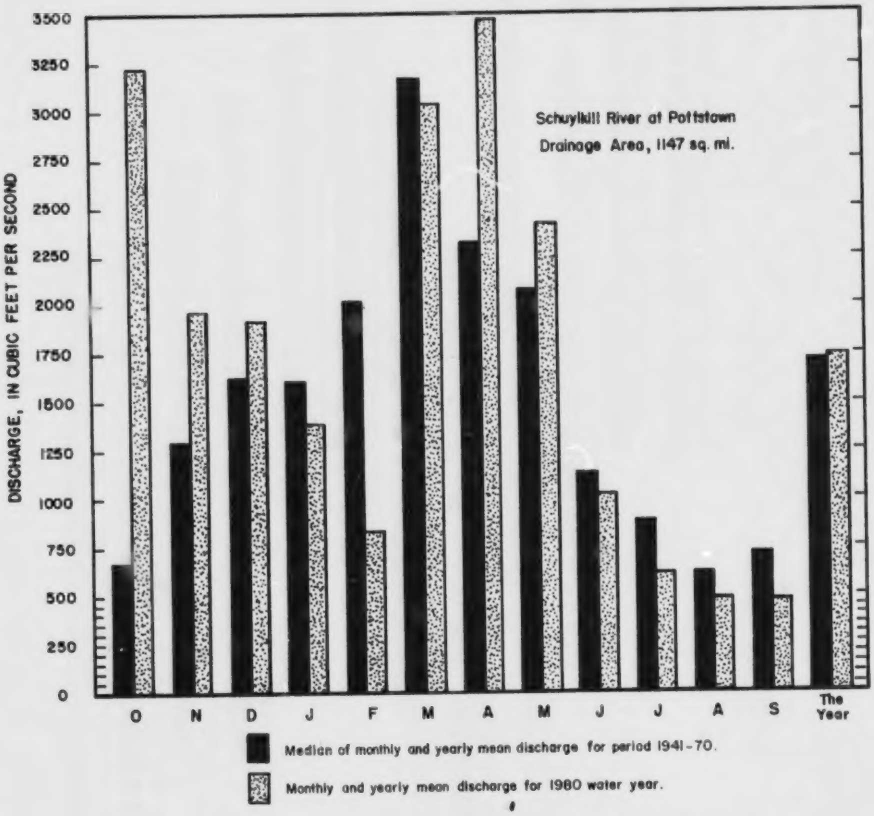

Figure 2.--Comparison of discharge at Schuylkill River at Pottstown during 1980 water year with median discharge for period 1941-70.

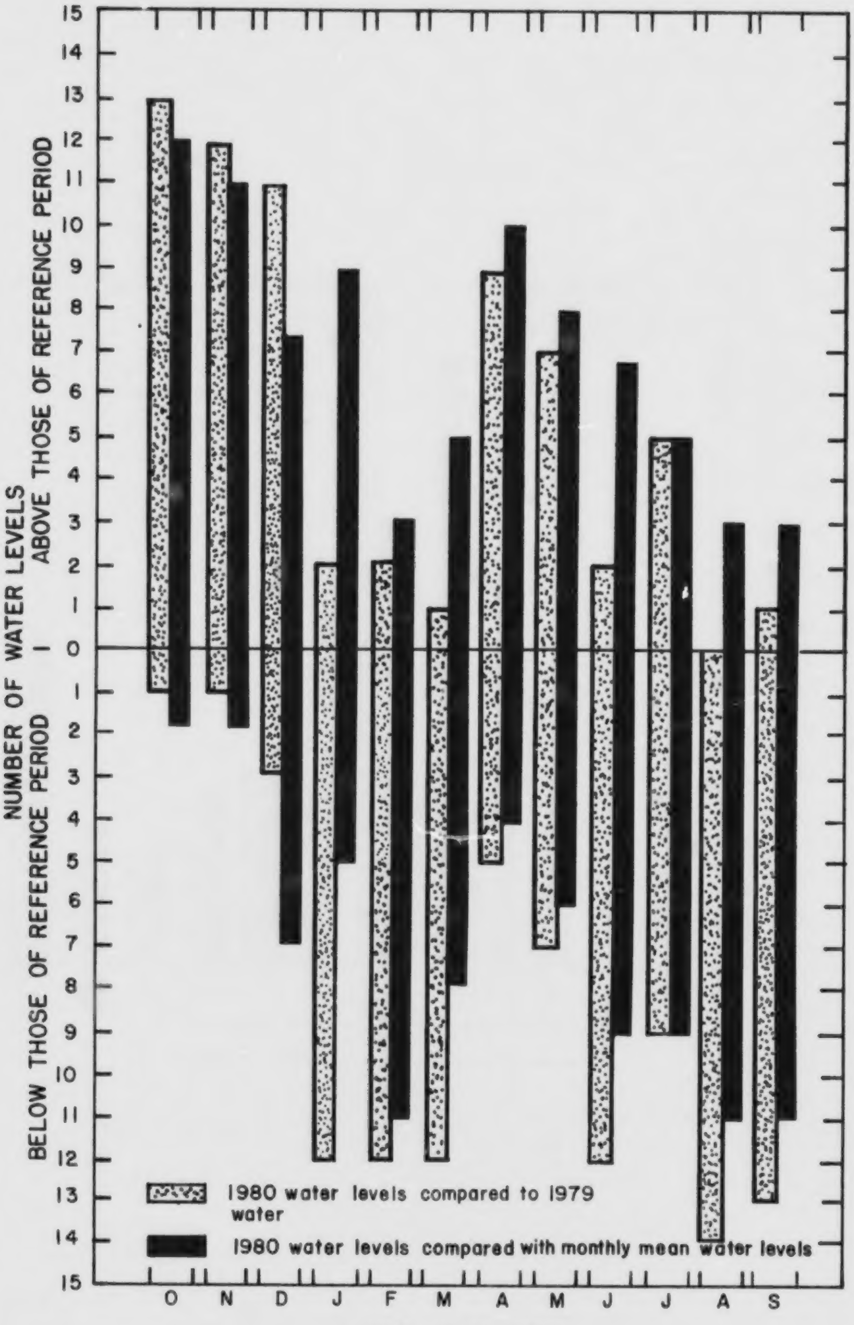

Figure 3.--Comparison of 1980 water levels in network observation wells with (a) 1979 water levels and (b) monthly mean water levels for period of record.

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. See also the table for converting inch-pound units to International System of units (SI) on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer, tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as the organisms which produce colonies within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C + 1.0°C on M-enterrococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material is the unconsolidated material of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2).

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash, and sediment in the sample. Dry mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and ash mass, and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons or 2,447 cubic meters.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll *a* and *b* are the two most common pigments in plants.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (FT^3/S, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment) that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a 0.45 µm membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Diversity index is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = -\sum_{i=1}^{s} \frac{n_i}{n} \log_2 \frac{n_i}{n}$$

Where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Diversity index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a stream at a specific location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the river above the specified point. Figures of drainage area given herein include all closed basins, or noncontribution areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per gram (µg/g) is a unit expressing the concentration of a chemical element as the mass (micrograms) of the element sorbed per unit mass (gram) of sediment.

Micrograms per liter (UG/L, μg/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L, and is based on the mass of sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meters (m^2), acres, or hectares. Periphyton benthic organisms, and macrophytes are expressed in these terms.

Organisms count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliters (mL) or liters (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Partial-record station is a particular site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology.

The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay	0.00024 - 0.004	Sedimentation.
Silt	0.004 - 0.062	Sedimentation.
Sand	0.062 - 2.0	Sedimentation or sieve.
Gravel	2.0 - 64.0	Sieve.

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native water analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, mass or volume.

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells/mL of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells/mL of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column, and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Runoff in inches (IN, in) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that orginiates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons/day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight or volume, that passes a section in a given time. It is computed by multiplying discharge times mg/L times 0.0027.

Suspended-sediment load is quantity of suspended sediment passing a section in a specified period.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry weight or volume, that passes a section during a given time.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in micromhos per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in the solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and volume of water per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lived.

Natural substrates refers to any naturally occurring emersed or submersed solid surface, such as a rock or tree, upon which an organism lived.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multi-plate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection.

Surface area of a lake is that area outlined on the latest USGS topographic map as the boundary of the lake and *measured by* a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered. All areas shown are those for the stage when the planimetered map was made.

Surficial bed material is that part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45 μm membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) *dissolved* and (2) *total recoverable* concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45 μm membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) *dissolved* and (2) *total* concentrations of the constituent.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata* is the following:

Kingdom	Animal
Phylum	Arthropoda
Class	Insecta
Order	Ephemeroptera
Family	Ephemeridae
Genus	Hexagenia
Species	*Hexagenia limbata*

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of substance in solution or suspension that passes a stream section during a 24-hour day.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all of the constituent in the sample.)

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total in bottom material is the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

Total load (tons) is the total quantity of any individual constituent, as measured by dry mass or volume, that is *dissolved* in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge, times the mg/L of the constituent, times the factor 0.0027, times the number of days.

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WRD is used as an abbreviation for "Water-Resources Data" in the REVISED RECORDS paragraph to refer to State annual basic-data reports published before 1975.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

DOWNSTREAM ORDER AND STATION NUMBER

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indention in a list of stations in the front of the report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station such as 03041000, which appears just to the left of the station name, includes the 2-digit part number "03" plus the 6-digit downstream order number "041000."

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The 8-digit downstream order station numbers are not assigned to wells and some miscellaneous sites where only random water-quality samples or discharge measurements are taken.

The well and miscellaneous site numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote the degrees, minutes, and seconds of longitude, and the last 2 digits (assigned sequentially) identify the wells or other sites with a 1-second grid. See figure 4 below.

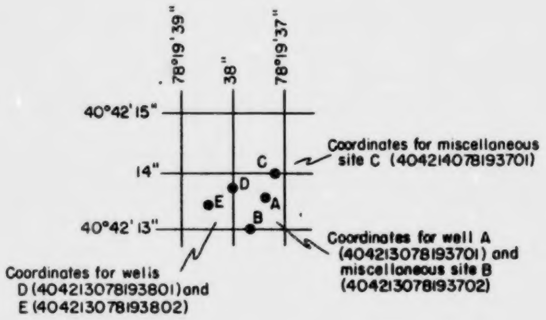
78°19'39"
38"
78°19'37"
40°42'15"
14"
40°42'13"
C
D
E
A
B
Coordinates for miscellaneous site C (404214078193701)
Coordinates for well A (404213078193701) and miscellaneous site B (404213078193702)
Coordinates for wells D (404213078193801) and E (404213078193802)

Figure 4.--System for numbering wells and miscellaneous sites (latitude and longitude).

A local well number is also assigned to the wells and consists of a 2-letter abbreviation of the county in which the well is located and a sequential number assigned at the time the well was scheduled.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

National stream-quality accounting network (NASQAN) is a data-collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated into the network design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality.

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams where potential contamination could result from the application of the commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Tritium network is a network of stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water station in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and computation of data

The base data collected at gaging stations consist of records of stage and measurement of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by hydrologists and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

At some northern stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of gage-height record and occasional winter discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents.

This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records for other stations in the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage heights are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location of the gaging station and the drainage area are obtained from most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge are affected by the revision, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The type of gage currently in use; the datum of the present gage referred to National Geodetic Vertical Datum; and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum is explained in "DEFINITION OF TERMS" on page 6.

Information pertaining to the accuracy of the discharge records and to conditions which affect the natural flow of the gaging station is given under "REMARKS." For reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. In addition, the median of yearly mean discharges is given for stream-gaging stations having 10 or more complete years of record if the median differs from the average by more than 10 percent. Under "EXTREMES" are given first, the extremes for the period of record, second, information available outside the period of record, and last, those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with "EXTREMES FOR THE CURRENT YEAR"; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

Skeleton rating tables are published, immediately following "EXTREMES," for stream-gaging stations where they serve a useful purpose and the dates of applicability can be easily identified.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, if the drainage area includes large noncontributing areas, or if the average annual rainfall over the drainage basin is usually less than 20 inches. In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharge are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-discharge relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used for computing discharge for various unusual conditions have been explained in preceding paragraphs.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations follow the information for continuous record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also given in special tables following the tables of partial-record stations.

Accuracy of field data and computed results

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretations of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good," within 10 percent; and "fair," within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 cfs; to tenths between 1.0 and 10 cfs; to whole numbers between 10 and 1,000 cfs; and to 3 significant figures above 1,000 cfs. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other data available

Information of a more detailed nature than that published for most of the gaging stations such as observations of water temperatures, discharge measurements, gage-height records, and rating tables is on file in the district office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and examination of data

Surface-water samples for analyses usually are collected at or near gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured on a daily basis (specific conductance, pH, dissolved oxygen, water temperature, sediment discharge, etc.); extremes for the period of daily record; extremes for the current year; and general remarks.

Water analysis

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey Techniques of Water-Resources Investigations listed on a following page.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the district office.

Water temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diel temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross section.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended-sediment and bed material are included.

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the data

Only ground-water level data from a basic network of observation wells are published herein. This basic network contains observation wells so located that the most significant data are obtained from the fewest wells in the most important aquifers.

Each well is identified by means of (1) a 15-digit number that is based on latitude and longtitude and (2) a local number that is provided for local needs. See figure 3.

Measurements are made in many types of wells, under varying conditions of access and at different temperatures, hence neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. The altitude of the land-surface datum above National Geodetic Vertical Datum is given in the well description. National Geodetic Vertical Datum is the datum plane on which the national network of precise levels is based. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom).

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-four manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 1200 South Eads Street, Arlington, VA 22202 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations".

1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.

1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.

2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.

3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.

3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.

3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.

3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.

3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.

3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.

3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.

3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.

3-A11. *Measurement of discharge by moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.

3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.

3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.

3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.

3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.

4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.

4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.

4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.

4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.

4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.

4-D1. *Computation of rate and volume of stream depletion by wells*, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.

5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.

5-A2. *Determination of minor elements in water by emission spectroscopy*, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.

5-A3. *Methods for analysis of organic substances in water*, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.

5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, edited by P. E. Greeson, T. A. Ehlke, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.

5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.

5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.

7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.

7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.

8-A1. *Methods of measuring water levels in deep wells*, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.

8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

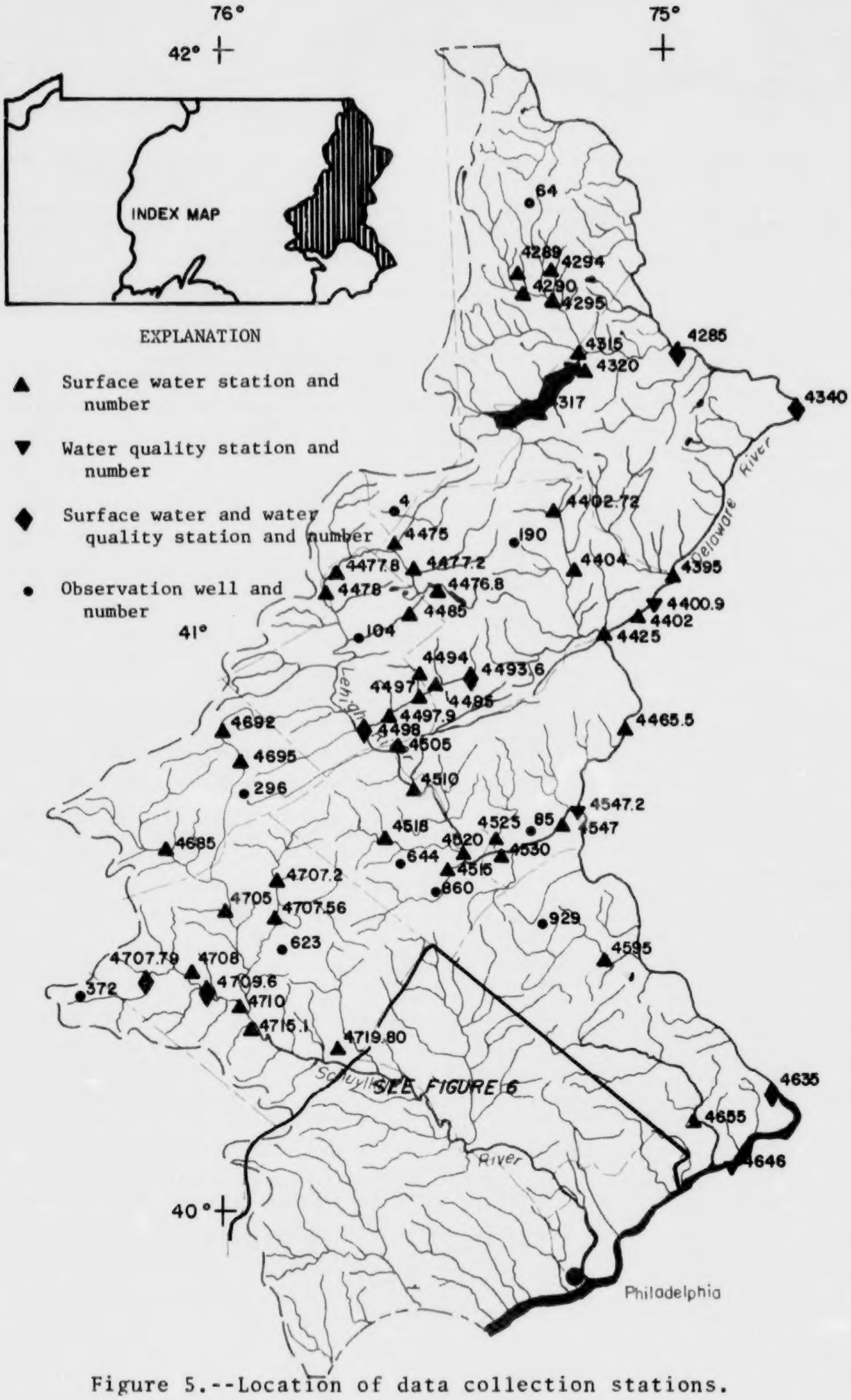
76°
75°
42°
INDEX MAP
EXPLANATION
▲ Surface water station and number
▼ Water quality station and number
◆ Surface water and water quality station and number
● Observation well and number
41°
40°
64
4289
4294
4290
4295
4315
4320
4285
317
4340
4402.72
4
4475
190
4477.8
4477.2
4404
4395
4478
4476.8
4400.9
4485
4402
104
4425
4494
4493.6
4497
4495
4497.9
4498
4692
4505
4465.5
4695
296
4510
4547.2
4518
4525
85
4547
4520
4530
4685
644
4516
4707.2
860
4705
4707.56
929
623
4595
4707.79
4708
4709.6
372
4710
4715.1
4719.80
SEE FIGURE 6
Lehigh
Schuylkill
River
Delaware River
4635
4655
4646
Philadelphia

Figure 5.--Location of data collection stations.

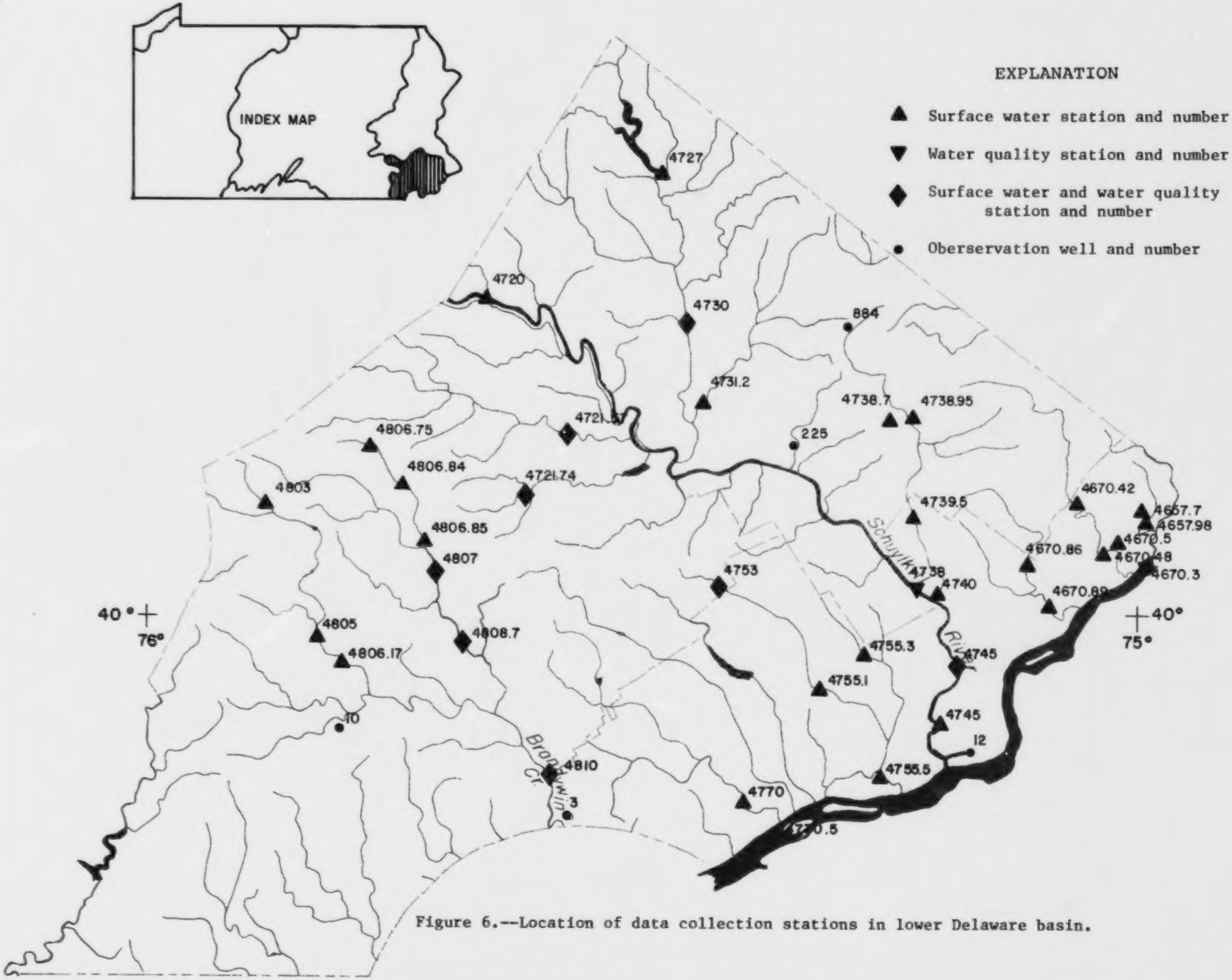
INDEX MAP
EXPLANATION
▲ Surface water station and number
▼ Water quality station and number
◆ Surface water and water quality station and number
● Oberservation well and number
4727
4720
4730
884
4731.2
4738.7
4738.95
225
4806.75
4806.84
4721.74
4803
4806.85
4807
4739.5
4670.42
4657.7
4657.98
4670.5
4670.86
4670.48
4670.3
4753
4738
4740
4670.89
40°
75°
40°
76°
4605
4806.17
4808.7
4755.3
Schuylkill
River
4745
4755.1
4745
10
12
Brandywine
Cr.
4810
3
4755.5
4770

Figure 6.--Location of data collection stations in lower Delaware basin.

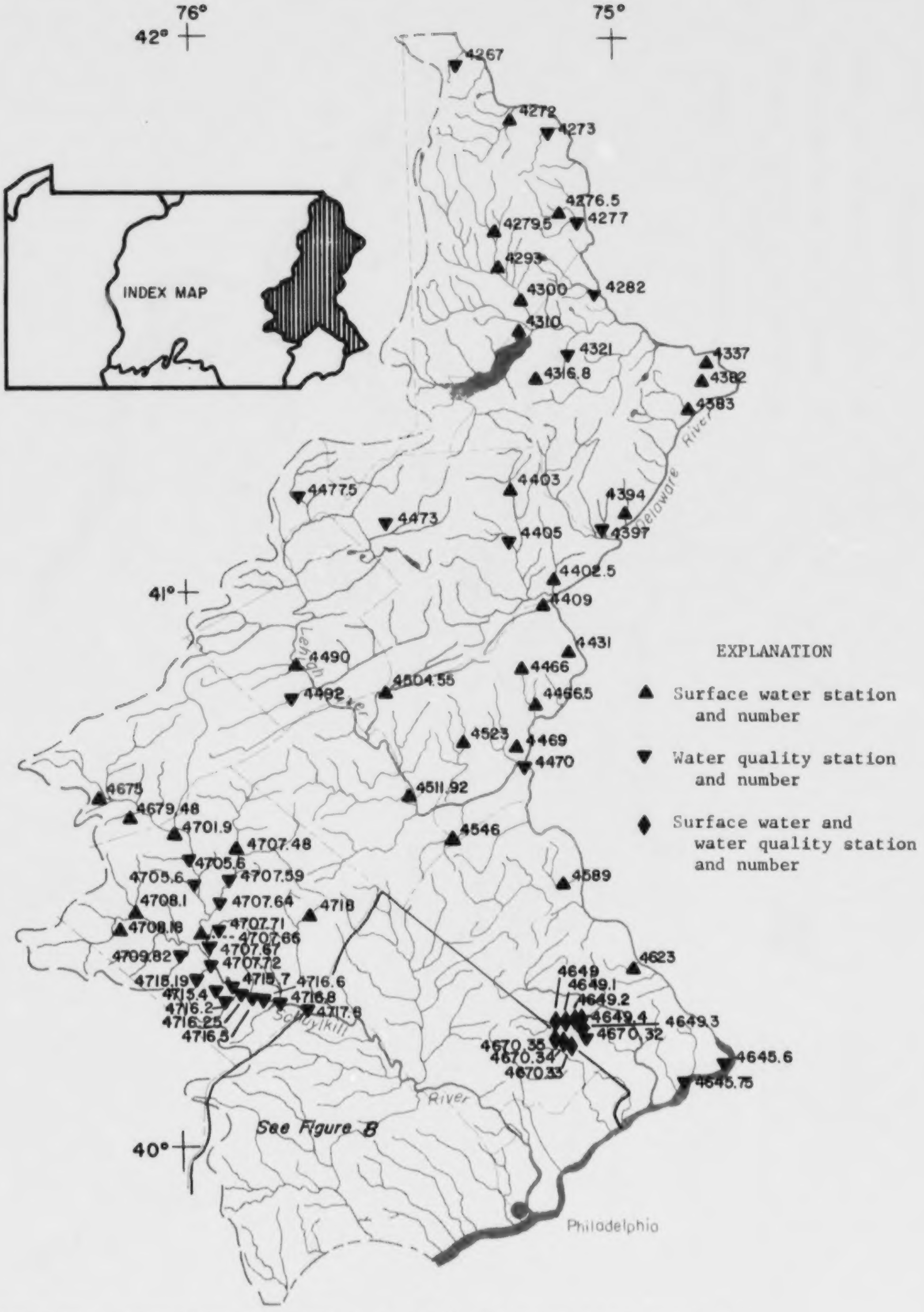
76°
75°
42°
41°
40°
INDEX MAP
4267
4272
4273
4276.5
4277
4279.5
4293
4300
4282
4310
4321
4316.8
4337
4382
4383
Delaware River
4403
4394
4397
4477.5
4473
4405
4402.5
4409
4431
4466
4466.5
4490
Lehigh River
4492
4504.55
4523
4469
4470
4511.92
4675
4679.48
4701.9
4707.48
4546
4705.6
4707.59
4705.6
4589
4708.1
4707.64
4718
4708.18
4707.71
4707.66
4707.67
4709.82
4707.72
4623
4649
4649.1
4649.2
4649.4
4649.3
4670.32
4716.19
4715.7
4716.6
4715.4
4716.8
4716.2
4717.8
4716.25
4716.5
Schuylkill River
4670.35
4670.34
4670.33
4645.6
4645.75
See Figure 8
Philadelphia
EXPLANATION
▲ Surface water station and number
▼ Water quality station and number
◆ Surface water and water quality station and number

Figure 7.--Location of partial-record and miscellaneous data collection stations.

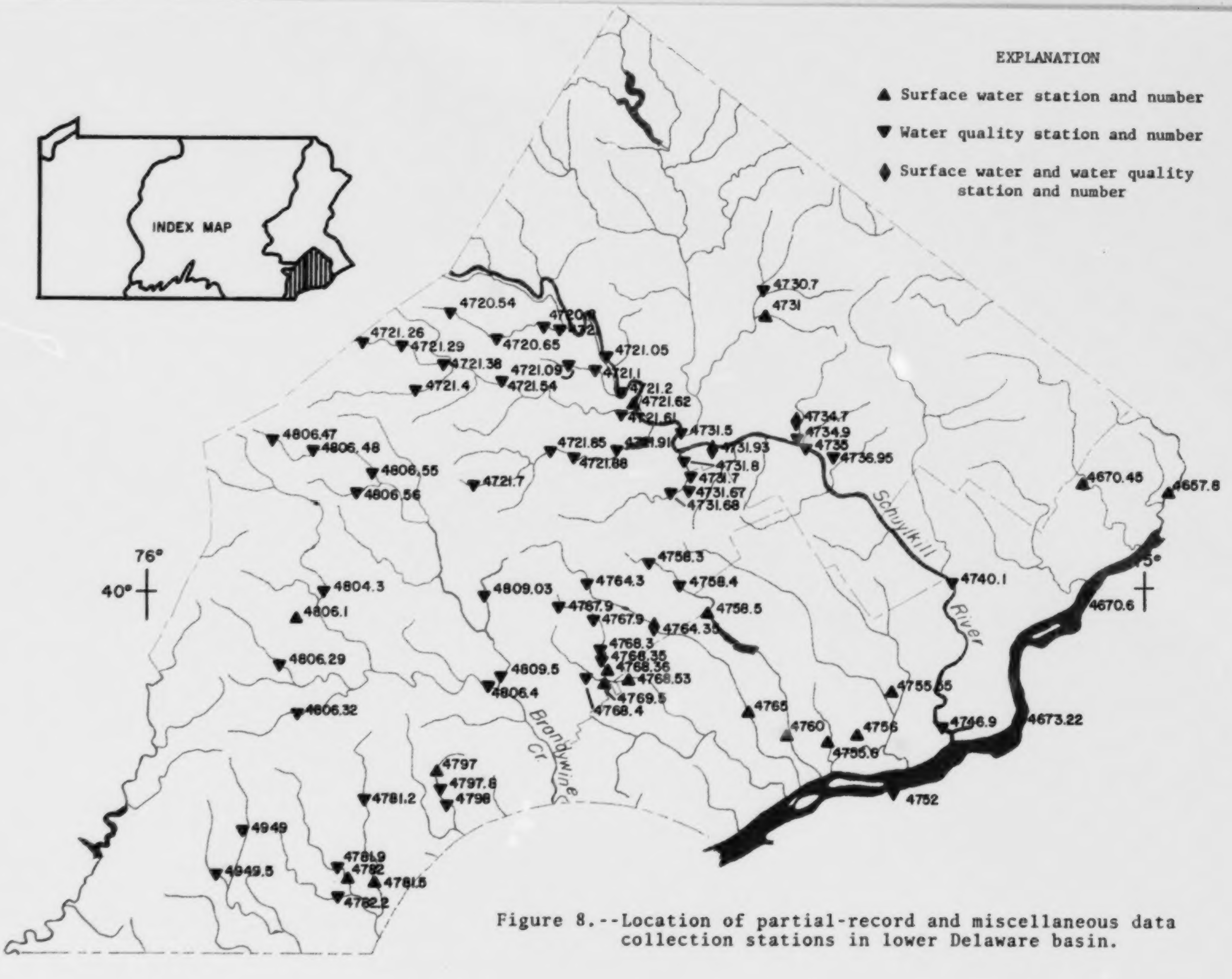
EXPLANATION
▲ Surface water station and number
▼ Water quality station and number
♦ Surface water and water quality station and number
INDEX MAP
76°
40°
75°
Schuylkill River
Brandywine Cr.
4720.54
4720.65
4721.26
4721.29
4721.38
4721.4
4721.09
4721.54
4721.05
4721.1
4721.2
4721.62
4721.61
4721.65
4721.88
4721.7
4731.5
4731.93
4731.8
4731.7
4731.67
4731.68
4730.7
4731
4734.7
4734.9
4735
4736.95
4740.1
4746.9
4755.55
4756
4755.6
4760
4765
4752
4756.3
4758.4
4758.5
4764.3
4764.35
4767.9
4768.3
4768.35
4768.36
4768.53
4769.5
4768.4
4806.47
4806.48
4806.55
4806.56
4804.3
4806.1
4806.29
4806.32
4809.03
4809.5
4806.4
4797
4797.6
4798
4781.2
4781.9
4782
4781.5
4782.2
4949
4949.5
4670.45
4657.8
4670.6
4673.22

Figure 8.--Location of partial-record and miscellaneous data collection stations in lower Delaware basin.

01412350 DELAWARE BAY AT SHIP JOHN SHOAL LIGHTHOUSE, NJ

LOCATION.--Lat 39°18'19", long 75°22'37", Cumberland County, Hydrologic Unit 02040204, water-quality recorder on lightship in bay opposite Bombay Hook Island, DE, and 3 mi (4.8 km) south southwest of mouth of Cohansey River, NJ.

PERIOD OF RECORD.--April 1969 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1969 to current year.
WATER TEMPERATURES: February 1970 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 52,800 micromhos Feb. 10, 1970; minimum, 1,500 micromhos Mar. 4, 1971.
WATER TEMPERATURES: Maximum, 33.0°C aug. 2, 1979; minimum, freezing point on many days during winter periods.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	24200	18400	21500	24000	17600	21200	19200	11200	15600	---	---	---
2	24300	17300	21600	24600	17100	20800	19600	12300	15500	---	---	---
3	23600	17100	21100	22700	16100	19300	21400	10600	15900	---	---	---
4	23300	15600	19900	24300	16600	20000	18600	12100	16000	---	---	---
5	22700	15200	19200	24600	16200	20000	21000	11800	16300	---	---	---
6	19800	11200	15700	22800	15200	19400	19000	11100	15900	---	---	---
7	19000	9740	14400	21300	14300	18500	17900	13700	---	---	---	---
8	16700	8360	12300	21800	13300	17900	---	---	---	---	---	---
9	15600	7720	11900	21400	14700	18200	---	---	---	---	---	---
10	18200	8300	13000	21400	12400	17700	---	---	---	---	---	---
11	19100	7750	14300	20000	12800	17200	---	---	---	---	---	---
12	17500	8740	13000	23100	14800	18500	---	---	---	---	---	---
13	16600	8640	12000	24600	15600	19800	---	---	---	---	---	---
14	18900	8130	12000	25400	15500	20600	---	---	---	---	---	---
15	20900	7750	14500	24300	15500	20800	---	---	---	---	---	---
16	21200	11900	16000	23100	18500	21100	---	---	---	---	---	---
17	22000	14700	18700	22800	19400	21600	---	---	---	---	---	---
18	21400	16900	19300	23900	18900	21200	---	---	---	---	---	---
19	21600	16800	19400	24600	19100	22200	---	---	---	---	---	---
20	21500	16500	19400	25200	19100	22500	---	---	---	---	---	---
21	20900	15700	18400	25700	19000	22400	---	---	---	---	---	---
22	20500	15200	18000	25200	18700	22200	---	---	---	---	---	---
23	20800	14700	18100	24300	17100	21400	---	---	---	---	---	---
24	20500	14700	17500	23000	17700	20900	---	---	---	---	---	---
25	19300	13500	16700	23300	17600	20700	---	---	---	---	---	---
26	20700	13300	17500	23900	16900	21000	---	---	---	---	---	---
37	22500	15200	19100	20500	16100	18300	---	---	---	---	---	---
28	23100	15700	19900	23500	13600	17500	---	---	---	22200	16400	20400
29	22700	14600	19700	18900	11600	15400	---	---	---	23200	17400	20800
30	22800	17000	20300	18800	11600	15100	---	---	---	22600	14800	19600
31	23800	18000	20900	---	---	---	---	---	---	25600	17100	21300
MONTH	24300	7720	17300	25700	11600	19800	21400	10600	15900	25600	14800	20500

01412350 DELAWARE BAY AT SHIP JOHN SHOAL LIGHTHOUSE, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	24900	19000	22200	29400	23800	26900	21300	11800	17700	19800	14000	17700
2	26400	19800	23600	31900	25100	28900	20500	9920	16100	---	---	---
3	26900	21400	24200	33300	27900	30900	17100	8890	13800	---	---	---
4	27900	21600	25000	32900	26900	31000	16200	8460	13200	---	---	---
5	28500	22600	26000	32600	28100	30600	15400	6960	11400	---	---	---
6	28700	24500	27200	31700	27600	29600	17600	7140	12300	---	---	---
7	30600	26200	28400	31700	26500	29500	17000	11200	14600	---	---	---
8	30900	25200	28500	31300	25700	28800	---	---	---	---	---	---
9	32400	24900	29100	30200	25900	28500	---	---	---	---	---	---
10	32100	25900	29200	31300	25700	28800	---	---	---	---	---	---
11	32100	25700	29500	31900	25200	28700	---	---	---	---	---	---
12	31700	26000	29500	29000	21400	26800	---	---	---	---	---	---
13	31300	26200	29500	32900	23800	28700	---	---	---	---	---	---
14	30600	26700	28700	31900	24500	28500	---	---	---	---	---	---
15	30900	25700	28400	29400	21800	25400	---	---	---	---	---	---
16	32400	26500	29000	29000	21400	25400	---	---	---	---	---	---
17	30400	24900	28000	30200	22200	26600	---	---	---	---	---	---
18	30400	24900	27800	29000	21500	25300	---	---	---	---	---	---
19	29400	23900	27400	27700	19600	24400	---	---	---	---	---	---
20	30400	25700	28200	27600	18500	23400	---	---	---	---	---	---
21	30200	24800	28200	27900	19200	23900	13500	6540	---	---	---	---
22	30400	25600	28400	23800	12500	19700	15900	6630	11200	---	---	---
23	30400	24900	28000	28300	11600	20700	16400	6940	11700	---	---	---
24	29000	24500	27300	27400	13100	20400	19400	8130	13600	---	---	---
25	29400	24900	27600	25900	12300	19700	19300	10300	15000	---	---	---
26	30200	26400	28400	25200	10600	18100	20100	12300	16000	---	---	---
27	31100	25700	28500	23300	11000	17800	20400	13000	17000	---	---	---
28	29800	24000	27600	24200	14000	19700	21300	15900	18500	---	---	---
29	28900	24500	27100	24900	16400	20800	21900	14400	19100	---	---	---
30	---	---	---	21400	15700	19100	20600	15400	18300	---	---	---
31	---	---	---	21900	16800	19500	---	---	---	---	---	---
MONTH	32400	19000	27600	33300	10600	25000	21900	6540	15000	19800	14000	17700

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1							---	---	---	29400	25200	27500
2							---	---	---	29800	24500	27100
3							---	---	---	29200	22500	27000
4							---	---	---	30200	24800	27400
5							---	---	---	29600	25100	27400
6							---	---	---	29800	24300	27400
7							---	---	---	30200	25600	27500
8							---	---	---	30600	27100	28400
9							---	---	---	30400	26500	28700
10							---	---	---	29800	25600	27400
11							---	---	---	29800	25600	27900
12							---	---	---	29200	25700	27600
13							---	---	---	29400	25400	27800
14							25900	21200	---	29800	26000	28100
15							24300	19200	21600	29400	25200	27900
16							25200	19900	22100	32600	27200	29500
17							23500	20600	22100	32100	27700	30000
18							29400	23600	27100	30200	23600	28000
19							30200	23300	27200	30600	22600	28000
20							30200	22800	27600	29400	24800	26900
21							31700	26000	28900	30900	22800	27600
22							31700	27400	29700	31500	25900	28500
23							31500	27600	29600	31500	26400	29100
24							31500	27100	29400	33100	27100	30000
25							31700	25900	29200	33300	28500	31000
26							31700	27100	29200	33100	25900	29300
27							31500	26500	29100	30900	25700	28100
28							31300	26500	28900	29600	25200	27600
29							31500	26900	29500	32400	24500	28200
30							31300	26200	29100	31500	24900	29500
31							29800	24800	28100	---	---	---
MONTH							31700	19200	27600	33300	22500	28200

01412350 DELAWARE BAY AT SHIP JOHN SHOAL LIGHTHOUSE, NJ--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	23.5	21.5	22.0	14.5	14.0	14.0	---	---	---	---	---	---
2	22.5	21.5	21.5	14.5	14.0	14.5	---	---	---	---	---	---
3	21.5	21.0	21.5	14.5	14.0	14.5	---	---	---	---	---	---
4	21.5	21.0	21.5	---	---	---	10.0	9.0	9.0	---	---	---
5	21.5	21.0	21.0	---	---	---	9.0	8.5	9.0	---	---	---
6	---	---	---	---	---	---	9.0	8.5	8.5	---	---	---
7	---	---	---	---	---	---	9.0	8.5	8.5	---	---	---
8	---	---	---	---	---	---	8.5	8.0	8.5	---	---	---
9	---	---	---	---	---	---	8.0	8.0	8.0	---	---	---
10	---	---	---	---	---	---	8.0	7.5	8.0	---	---	---
11	---	---	---	---	---	---	8.0	8.0	8.0	---	---	---
12	---	---	---	---	---	---	8.5	8.0	8.0	---	---	---
13	---	---	---	---	---	---	8.5	8.0	8.5	---	---	---
14	---	---	---	---	---	---	8.0	8.0	8.0	---	---	---
15	---	---	---	12.0	11.5	12.0	8.0	7.5	8.0	---	---	---
16	---	---	---	12.0	11.5	11.5	8.0	7.5	8.0	---	---	---
17	15.5	15.5	15.5	11.5	11.5	11.5	8.0	7.5	---	---	---	---
18	16.0	15.5	15.5	11.5	11.5	11.5	---	---	---	---	---	---
19	16.0	15.5	16.0	12.0	11.5	11.5	---	---	---	---	---	---
20	16.5	16.0	16.0	11.5	11.5	11.5	---	---	---	---	---	---
21	16.5	16.0	16.5	12.0	11.5	11.5	---	---	---	---	---	---
22	17.0	16.5	16.5	12.0	11.5	11.5	---	---	---	---	---	---
23	17.0	16.5	17.0	12.0	11.5	12.0	---	---	---	---	---	---
24	---	---	---	12.0	12.0	12.0	---	---	---	---	---	---
25	---	---	---	12.5	12.0	12.0	---	---	---	---	---	---
26	16.0	15.5	15.5	13.0	12.0	12.5	---	---	---	---	---	---
27	15.5	14.5	15.0	13.0	12.5	12.5	---	---	---	---	---	---
28	15.0	14.5	14.5	13.0	12.5	12.5	---	---	---	3.5	3.0	3.5
29	14.5	14.0	14.5	---	---	---	---	---	---	3.5	3.0	3.0
30	14.5	14.0	14.5	---	---	---	---	---	---	3.0	2.5	2.5
31	14.5	13.5	14.0	---	---	---	---	---	---	2.5	2.0	2.0
MONTH	23.5	13.5	17.0	14.5	11.5	12.5	10.0	7.5	8.5	3.5	2.0	3.0

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	2.0	1.0	1.5	1.5	1.0	1.5						
2	1.0	.0	.5	1.0	.5	1.0						
3	.5	.0	.0	.5	.0	.5						
4	.5	.0	.0	1.0	.0	.5						
5	.5	.0	.0	1.5	1.0	1.0						
6	.0	.0	.0	2.0	1.0	1.5						
7	.5	.0	.0	2.5	1.5	2.0						
8	.5	.0	.5	3.0	2.0	2.5						
9	.5	.0	.5	5.5	2.5	4.0						
10	1.0	.0	.5	4.5	3.5	4.0						
11	1.0	.5	1.0	4.0	4.0	---						
12	1.0	.5	1.0	---	---	---						
13	1.0	1.0	1.0	5.0	4.5	5.0						
14	1.5	1.0	1.0	5.0	4.0	4.5						
15	1.5	1.0	1.5	4.5	4.0	4.5						
16	1.5	1.0	1.5	4.5	4.0	4.5						
17	1.0	1.0	1.0	5.0	4.5	5.0						
18	1.0	.5	1.0	5.5	5.0	5.0						
19	1.5	1.0	1.0	6.0	5.0	5.5						
20	2.0	1.0	1.5	6.0	5.5	6.0						
21	2.0	1.5	2.0	6.5	5.5	6.0						
22	2.5	2.0	2.0	6.5	6.0	6.0						
23	2.5	2.0	2.5	7.0	5.5	6.0						
24	3.5	2.5	2.5	7.0	6.0	6.5						
25	3.0	2.5	3.0	7.5	6.5	6.5						
26	3.0	2.5	2.5	7.5	6.5	7.0						
27	3.0	2.5	2.5	9.0	6.5	7.5						
28	2.5	2.5	2.5	8.0	7.0	7.5						
29	2.5	1.5	2.0	8.0	7.5	7.5						
30	---	---	---	8.5	7.5	8.0						
31	---	---	---	8.0	8.0	8.0						
MONTH	3.5	.0	1.5	9.0	.0	4.5						

01412350 DELAWARE BAY AT SHIP JOHN SHOAL LIGHTHOUSE, NJ--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	---	---	---	---	---	---	28.5	28.0	28.5	27.5	26.5	27.0
2	20.5	19.5	---	---	---	---	28.5	28.0	28.5	28.5	27.0	27.5
3	21.0	20.0	20.5	---	---	---	29.0	28.5	28.5	28.0	27.0	27.5
4	21.0	20.0	20.5	---	---	---	29.0	28.5	28.5	28.5	27.0	27.5
5	20.5	20.0	20.5	---	---	---	30.5	28.5	29.0	27.5	27.0	27.0
6	20.5	20.0	20.0	---	---	---	30.5	29.0	29.0	28.0	27.0	27.0
7	22.0	19.5	20.5	---	---	---	31.0	29.0	29.0	27.0	26.5	27.0
8	21.0	20.0	20.5	---	---	---	30.0	29.0	29.0	27.0	26.5	26.5
9	20.5	19.5	20.0	---	---	---	30.0	29.0	29.5	26.5	26.0	26.5
10	20.0	19.5	19.5	---	---	---	29.5	29.0	29.0	26.0	26.0	26.0
11	20.0	19.5	19.5	---	---	---	29.5	29.0	29.0	26.0	25.5	25.5
12	20.0	19.5	19.5	---	---	---	29.0	29.0	29.0	26.0	25.0	25.5
13	20.0	19.0	19.5	---	---	---	29.0	28.5	28.5	25.5	25.0	25.0
14	20.5	19.0	20.0	---	---	---	28.5	28.5	28.5	25.5	25.0	25.5
15	21.0	19.5	20.0	---	---	---	28.5	28.0	28.5	25.5	25.0	25.0
16	20.5	20.0	20.5	---	---	---	28.0	27.0	27.5	25.0	24.0	24.5
17	20.5	20.0	20.0	---	---	---	27.0	26.0	26.5	24.5	24.0	24.0
18	---	---	---	---	---	---	26.5	25.5	26.0	24.5	24.0	24.0
19	---	---	---	---	---	---	26.0	25.5	25.5	24.5	23.5	24.0
20	---	---	---	---	---	---	26.0	25.5	26.0	24.0	24.0	24.0
21	---	---	---	---	---	---	26.0	25.0	25.5	24.5	24.0	24.0
22	---	---	---	---	---	---	25.5	24.5	25.0	25.0	24.0	24.5
23	---	---	---	28.5	28.0	---	26.0	24.5	25.0	25.0	24.5	24.5
24	---	---	---	28.5	27.5	28.0	26.0	24.5	25.0	24.5	24.0	24.5
25	---	---	---	28.5	27.5	28.0	26.0	25.0	25.5	24.0	23.5	24.0
26	---	---	---	28.5	27.5	28.0	26.0	25.0	25.5	23.5	23.0	23.5
27	---	---	---	28.5	27.5	28.0	26.5	25.0	26.0	23.0	22.0	22.5
28	---	---	---	28.0	27.5	28.0	26.5	25.5	26.0	22.0	21.5	21.5
29	---	---	---	28.5	27.5	28.0	26.5	26.0	26.0	21.5	21.0	21.5
30	---	---	---	28.5	27.5	28.0	26.5	26.0	26.5	21.5	21.0	21.0
31	---	---	---	28.5	28.0	28.0	27.0	26.5	26.5	---	---	---
MONTH	22.0	19.0	20.0	28.5	27.5	28.0	31.0	24.5	27.5	28.5	21.0	25.0

DELAWARE RIVER BASIN

01428500 DELAWARE RIVER ABOVE LACKAWAXEN RIVER NEAR BARRYVILLE, NY

LOCATION.--Lat 41°30'31", long 74°59'11", Sullivan County, Hydrologic Unit 02040101, on left bank 1.6 mi (2.6 km) upstream from Lackawaxen River, and 4.6 mi (7.4 km) northwest of Barryville. Water-quality sampling site at discharge station.

DRAINAGE AREA.--2,023 mi^2 (5,240 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 600.22 ft (182.947 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records excellent except those for winter periods, which are poor. Subsequent to September 1954, entire flow from 371 mi^2 (961 km^2) of drainage area controlled by Pepacton Reservoir (see Reservoirs in Delaware River Basin), and subsequent to October 1963, entire flow from 454 mi^2 (1,176 km^2) of drainage area controlled by Cannonsville Reservoir (see Reservoirs in Delaware River Basin). Part of flow of these reservoirs diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 130,000 ft^3/s (3,680 m^3/s) Aug. 19, 1955, gage height, 26.40 ft (8.047 m) from floodmarks in gage house, from rating curve extended above 55,000 ft^3/s (1,560 m^3/s) on basis of slope-area measurement at gage height 23.19 ft (7.068 m); minimum, 122 ft^3/s (3.46 m^3/s) Sept. 5, 1953, gage height, 1.11 ft (0.338 m); minimum daily, 126 ft^3/s (3.57 m^3/s) Sept. 4, 1953.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 49,900 ft^3/s (1,413 m^3/s) Mar. 22, gage height, 14.78 ft (4.505 m); minimum, 524 ft^3/s (14.84 m^3/s) June 14, gage height, 2.19 ft (0.668 m); minimum daily, 540 ft^3/s (15.29 m^3/s) Feb. 2-5, Feb. 28-Mar. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1330	1220	4600	1850	560	540	10600	8210	1040	2650	887	1460
2	3760	1200	4220	1600	540	540	9150	7020	1130	1630	1280	1180
3	3410	5770	3830	1300	540	540	8050	6090	1160	1250	1640	1030
4	4130	7980	3490	1200	540	560	8260	5160	807	1080	1350	1210
5	3410	5270	3160	1100	540	600	9260	4330	880	977	1250	1110
6	6880	4030	2750	1100	800	660	8050	3780	1100	1140	1150	1520
7	6020	3360	2400	1100	900	760	6860	3450	1210	1370	1040	1550
8	4430	2930	2120	1200	860	1000	6080	3160	1250	1170	879	1240
9	3660	2570	1950	1500	820	1600	6540	2770	848	1000	1040	1110
10	4200	2360	1880	1600	800	1800	14700	2460	962	935	1160	1140
11	3570	2370	1850	1600	780	1500	12900	2240	1040	877	1090	1170
12	3430	2190	1810	1600	760	1300	11100	2260	735	1110	735	1230
13	3010	1950	1800	1500	740	1200	10200	2180	570	1220	665	1460
14	2820	1830	1890	1400	840	1000	9330	2270	963	921	850	1540
15	2440	1740	1750	1400	1000	800	11400	2170	1250	740	782	1110
16	2220	1660	1610	1500	900	820	10900	1780	964	719	1400	856
17	2010	1610	1610	1400	800	880	9150	1510	1000	741	1320	981
18	1810	1490	1300	1300	740	2500	7810	1360	872	705	1020	977
19	1680	1480	1100	1200	680	5000	6790	1400	993	898	920	1150
20	1530	1440	1100	1200	620	5400	5930	1470	958	1120	924	1360
21	1420	1350	1200	1200	840	10800	5240	1370	1230	887	1080	1520
22	1340	1280	1400	1200	880	38600	4540	1290	1460	772	1040	1110
23	1240	1240	1400	1100	740	14500	3770	1190	1190	917	1320	781
24	1390	1230	1300	1100	660	9070	3230	1080	1150	886	1430	731
25	1940	1470	2780	1100	580	9170	2880	998	1270	782	1250	830
26	1720	3880	4100	1100	560	7480	2620	896	1300	1220	1230	805
27	1530	22500	3280	1100	560	5810	2440	818	1190	1260	1210	1190
28	1450	11800	2750	900	540	5880	3050	767	1370	1020	1270	1470
29	1470	7250	2440	760	540	7710	7490	770	1580	813	1310	1070
30	1460	5220	2240	640	---	11300	9390	953	1980	782	1550	871
31	1330	---	2060	580	---	11200	---	1050	---	1250	1560	---
TOTAL	82040	111670	71170	38430	20660	160520	227710	76252	33452	32842	35632	34762
MEAN	2646	3722	2296	1240	712	5178	7590	2460	1115	1059	1149	1159
MAX	6880	22500	4600	1850	1000	38600	14700	8210	1980	2650	1640	1550
MIN	1240	1200	1100	580	540	540	2440	767	570	705	665	731

CAL YR 1979 TOTAL 1362103 MEAN 3732 MAX 45200 MIN 633
WTR YR 1980 TOTAL 925140 MEAN 2528 MAX 38600 MIN 540

01428500 DELAWARE RIVER ABOVE LACKAWAXEN RIVER NEAR BARRYVILLE, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968 to current year.
CHEMICAL DATA: 1971-73 (a).
NUTRIENT DATA: 1971 (a).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1967 to current year (no record for winter months each year except water years 1968, 1977-80).

INSTRUMENTATION.--Temperature recorder since October 1967.

REMARKS.--No record May 31 to June 24, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1968-75, 1980), 32.0°C Aug. 2, 3 1975; minimum (water years 1968, 1977-80), freezing point on many days during winter periods, each year except 1980.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 30.5°C July 21, Aug. 8, 9; minimum 1.0°C on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.5	15.0	16.5	9.5	6.5	8.0	4.5	3.5	4.0	2.5	1.0	1.5
2	17.0	16.0	16.5	10.0	8.5	9.5	3.5	3.0	3.5	1.5	1.0	1.0
3	17.0	16.5	16.5	10.0	9.5	9.5	3.0	2.5	2.5	1.5	1.0	1.0
4	17.0	16.0	16.5	9.5	8.5	8.5	3.0	2.5	2.5	1.0	1.0	1.0
5	16.5	16.0	16.5	8.0	7.5	7.5	3.5	3.0	3.5	1.0	1.0	1.0
6	16.0	15.0	15.5	7.5	7.0	7.0	4.0	3.0	3.5	1.5	1.0	1.0
7	15.0	13.5	14.0	7.0	7.0	7.0	5.0	4.0	4.5	1.0	1.0	1.0
8	13.0	12.0	12.5	7.5	7.0	7.0	5.0	3.5	4.5	1.0	1.0	1.0
9	12.0	11.0	11.5	7.5	7.0	7.5	3.5	2.5	3.0	1.0	1.0	1.0
10	11.0	9.5	10.5	8.5	7.5	8.0	3.5	2.5	3.0	1.0	1.0	1.0
11	10.0	9.0	9.5	8.5	8.0	8.0	4.5	2.5	3.5	1.0	1.0	1.0
12	9.0	9.0	9.0	8.5	8.0	8.0	5.0	3.0	4.0	1.0	1.0	1.0
13	10.0	9.0	9.5	8.5	8.0	8.0	5.0	4.5	4.5	1.0	1.0	1.0
14	9.5	9.0	9.5	8.0	6.5	7.5	4.5	3.5	4.0	1.0	1.0	1.0
15	9.5	9.0	9.0	6.5	6.0	6.5	3.5	2.0	3.0	1.0	1.0	1.0
16	10.5	8.5	9.5	6.0	4.5	5.5	3.0	1.5	2.5	1.0	1.0	1.0
17	10.0	9.0	9.5	6.0	4.0	5.0	2.5	1.0	1.5	1.0	1.0	1.0
18	12.0	9.5	10.5	6.0	3.5	5.0	1.0	1.0	1.0	1.0	1.0	1.0
19	13.0	11.0	12.0	6.5	4.5	5.5	1.0	1.0	1.0	1.0	1.0	1.0
20	15.0	12.0	13.0	7.5	5.0	6.0	1.0	1.0	1.0	1.5	1.0	1.0
21	16.5	13.5	15.0	8.0	5.5	6.5	1.0	1.0	1.0	1.5	1.0	1.0
22	18.0	14.5	16.0	7.5	6.5	7.0	1.0	1.0	1.0	1.0	1.0	1.0
23	17.5	15.5	16.5	9.5	7.5	8.0	1.0	1.0	1.0	1.0	1.0	1.0
24	16.5	14.5	15.5	10.0	8.0	9.0	1.0	1.0	1.0	1.5	1.0	1.0
25	14.5	12.0	13.0	11.0	10.0	10.5	2.5	1.0	1.5	1.0	1.0	1.0
26	11.5	9.5	10.5	12.5	11.0	12.0	3.0	1.5	2.5	1.0	1.0	1.0
27	9.0	7.5	8.5	13.0	10.0	11.5	3.0	2.5	3.0	1.0	1.0	1.0
28	7.5	7.0	7.0	10.0	8.5	9.0	3.0	2.5	2.5	1.0	1.0	1.0
29	7.5	7.0	7.0	8.0	6.5	7.0	3.0	2.5	2.5	1.0	1.0	1.0
30	8.0	7.0	7.0	6.0	4.5	5.5	3.0	2.0	2.5	1.5	1.0	1.0
31	9.0	6.0	7.5	---	---	---	3.0	1.5	2.0	1.5	1.0	1.0
MONTH	18.0	6.0	12.0	13.0	3.5	7.5	5.0	1.0	2.5	2.5	1.0	1.0

01428500 DELAWARE RIVER ABOVE LACKAWAXEN RIVER NEAR BARRYVILLE, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.0	1.0	1.0	1.0	1.0	1.0	5.5	4.0	4.5	13.0	10.5	11.5
2	1.5	1.0	1.0	1.0	1.0	1.0	6.0	5.5	5.5	13.5	12.0	13.0
3	1.5	1.0	1.0	1.0	1.0	1.0	6.5	4.5	5.5	14.5	12.5	13.5
4	1.5	1.0	1.0	1.0	1.0	1.0	7.0	6.0	6.5	15.0	13.0	14.0
5	1.0	1.0	1.0	1.0	1.0	1.0	7.0	6.0	6.5	15.5	13.5	14.5
6	1.5	1.0	1.0	1.5	1.0	1.0	7.5	5.5	6.5	16.5	14.5	15.5
7	1.0	1.0	1.0	1.5	1.0	1.0	8.5	6.5	7.5	16.0	14.5	15.5
8	1.0	1.0	1.0	1.0	1.0	1.0	8.5	7.5	8.0	15.5	14.0	14.5
9	1.0	1.0	1.0	1.0	1.0	1.0	9.0	8.0	8.5	14.0	12.0	13.0
10	1.0	1.0	1.0	1.0	1.0	1.0	9.0	8.0	8.5	14.5	11.0	12.5
11	1.0	1.0	1.0	1.0	1.0	1.0	9.0	8.0	8.5	13.5	12.5	13.0
12	1.0	1.0	1.0	1.5	1.0	1.0	9.0	8.0	8.5	14.0	12.0	13.0
13	1.0	1.0	1.0	1.0	1.0	1.0	9.5	8.0	9.0	15.5	13.0	14.0
14	1.0	1.0	1.0	1.0	1.0	1.0	9.5	7.5	8.5	17.0	14.5	15.5
15	1.0	1.0	1.0	1.0	1.0	1.0	8.0	7.0	7.5	16.0	14.0	15.0
16	1.0	1.0	1.0	1.0	1.0	1.0	8.0	6.5	7.5	17.5	13.0	15.0
17	1.0	1.0	1.0	1.0	1.0	1.0	6.5	5.0	6.0	18.5	13.5	16.0
18	1.0	1.0	1.0	1.5	1.0	1.0	7.5	5.5	7.0	16.5	15.5	15.5
19	1.0	1.0	1.0	1.5	1.0	1.0	9.0	6.5	8.0	19.0	15.0	17.0
20	1.0	1.0	1.0	2.0	1.0	1.5	9.5	8.0	9.0	19.5	16.0	17.5
21	1.0	1.0	1.0	2.0	1.0	1.5	11.0	9.0	10.0	19.0	17.0	18.0
22	1.0	1.0	1.0	2.0	1.5	2.0	11.0	9.5	10.5	20.5	16.0	18.5
23	1.0	1.0	1.0	3.5	2.0	3.0	12.0	10.0	11.0	22.0	17.0	19.5
24	1.0	1.0	1.0	4.5	3.0	3.5	13.5	11.0	12.0	23.5	19.0	21.0
25	1.5	1.0	1.0	4.5	4.0	4.0	13.0	12.0	12.5	24.5	19.5	21.5
26	1.0	1.0	1.0	4.0	3.5	3.5	13.5	11.5	12.5	22.5	18.0	20.0
27	1.0	1.0	1.0	5.0	3.0	4.0	12.0	11.0	12.0	22.0	16.5	19.0
28	1.0	1.0	1.0	5.5	4.0	5.0	11.0	10.0	10.5	22.0	16.5	19.0
29	1.0	1.0	1.0	5.5	5.0	5.5	10.0	9.5	9.5	23.0	17.5	20.0
30	---	---	---	5.0	4.5	4.5	10.5	9.0	10.0	21.5	19.0	20.0
31	---	---	---	4.5	4.5	4.5	---	---	---	---	---	---
MONTH	2.0	1.0	1.0	5.5	1.0	2.0	13.5	4.0	8.5	24.5	10.5	16.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	21.5	18.5	20.0	27.5	23.5	25.0	24.5	21.5	23.0
2	---	---	---	21.5	20.0	20.5	26.5	23.5	25.0	25.5	21.5	23.5
3	---	---	---	22.5	20.0	21.0	26.5	24.0	25.5	26.5	22.0	24.0
4	---	---	---	26.0	20.5	23.0	26.5	22.5	24.5	26.0	22.0	24.0
5	---	---	---	25.5	22.0	24.0	26.0	23.0	25.0	24.0	21.5	23.0
6	---	---	---	25.5	22.0	23.5	28.0	24.0	26.0	24.5	21.5	23.0
7	---	---	---	24.5	20.0	22.5	29.5	24.5	27.0	24.0	20.5	22.0
8	---	---	---	24.5	21.0	22.5	30.5	26.0	28.0	23.5	19.5	21.0
9	---	---	---	26.0	21.5	23.5	30.5	27.0	28.5	22.5	18.5	20.5
10	---	---	---	27.5	22.5	25.0	28.5	25.5	27.0	22.5	18.5	21.0
11	---	---	---	27.0	23.5	25.0	28.0	25.0	26.5	22.5	18.0	20.5
12	---	---	---	27.0	23.5	25.0	27.5	25.0	26.0	22.0	18.5	20.0
13	---	---	---	27.0	22.0	24.5	26.5	23.5	25.0	21.5	18.5	20.0
14	---	---	---	27.5	22.0	24.5	25.5	23.5	24.0	21.5	19.5	20.5
15	---	---	---	26.5	23.0	25.0	26.5	23.5	24.5	20.0	18.0	19.0
16	---	---	---	29.0	24.5	26.5	23.5	21.5	22.5	19.0	16.5	18.0
17	---	---	---	29.5	24.5	27.0	24.0	20.0	22.0	18.5	17.0	18.0
18	---	---	---	30.0	25.5	27.5	23.0	20.0	21.5	19.5	17.5	18.0
19	---	---	---	29.0	25.5	27.5	23.5	20.5	21.5	21.0	16.0	18.5
20	---	---	---	30.0	25.5	27.5	24.5	21.5	22.5	19.5	17.0	18.5
21	---	---	---	30.5	26.0	28.5	23.5	21.5	22.5	22.0	18.5	20.0
22	---	---	---	29.5	26.5	28.0	23.0	21.0	22.0	24.0	18.5	21.5
23	---	---	---	28.0	25.5	26.5	25.0	21.5	23.0	24.0	21.0	22.5
24	---	---	---	28.5	24.0	26.0	24.5	20.5	23.0	22.5	19.0	20.5
25	26.0	22.0	24.0	28.5	23.5	26.0	25.0	21.0	23.0	20.0	17.5	18.5
26	26.5	22.5	24.5	28.5	24.0	26.0	26.0	18.5	23.0	20.0	16.5	18.0
27	26.5	22.5	24.5	28.0	24.5	26.0	26.5	22.0	24.5	17.5	14.5	16.0
28	24.5	21.5	23.0	26.5	23.5	25.0	26.0	18.5	24.0	17.0	13.5	15.0
29	22.0	20.0	21.0	25.0	23.5	24.0	25.5	23.0	24.0	17.0	13.5	15.0
30	21.0	19.0	20.0	26.5	23.0	24.5	25.0	22.5	23.5	18.0	15.5	16.5
31	---	---	---	27.0	23.0	25.0	24.5	22.0	23.0	---	---	---
MONTH				30.5	18.5	25.0	30.5	18.5	24.5	26.5	13.5	20.0

01429000 WEST BRANCH LACKAWAXEN RIVER AT PROMPTON, PA

LOCATION.--Lat 41°35'14", long 75°19'38", Wayne County, Hydrologic Unit 02040103, on right bank 500 ft (150 m) downstream from Prompton Lake, 1,500 ft (460 m) upstream from bridge on U.S. Highway 6 at Prompton, and 2,000 ft (610 m) upstream from Van Auken Creek.

DRAINAGE AREA.--59.7 mi^2 (154.6 km^2).

PERIOD OF RECORD.--August 1944 to current year. Prior to October 1952, published as Lackawaxen River at Prompton.

REVISED RECORD.--WSP 1432: 1948-49. WRD PA-71: 1970(M).

GAGE.--Water-stage recorder. Datum of gage is 1,083.78 ft (330.336 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Prompton Lake (station 01428900) 500 ft (150 m) upstream. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--36 years, 111 ft^3/s (3.144 m^3/s), 25.36 in/yr (644 mm/yr), adjusted for storage since January 1961.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,860 ft^3/s (166 m^3/s) Aug. 18, 1955, gage height, 9.24 ft (2.816 m), from rating curve extended above 3,600 ft^3/s (102 m^3/s); no flow July 26 to Aug. 25, 1960, result of construction work upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 23, 1942, reached a stage of 16.7 ft (5.09 m), from floodmark.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,450 ft^3/s (41.1 m^3/s) March 21, gage height, 4.29 ft (1.308 m): minimum, 4.2 ft^3/s (0.12 m^3/s) Sept. 16, 17, gage height, 0.85 ft (0.259 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	41	149	74	26	18	381	224	30	23	12	11
2	89	50	128	69	24	18	363	181	31	22	15	11
3	100	268	106	66	22	18	300	160	32	22	19	10
4	163	272	95	59	21	18	346	135	34	19	20	10
5	135	197	87	56	21	18	395	113	30	18	19	9.5
6	169	152	81	53	21	18	304	98	26	23	18	9.1
7	141	128	78	48	20	18	238	89	25	23	17	7.9
8	118	111	72	42	19	58	204	81	26	21	17	6.7
9	102	98	66	40	18	155	280	72	24	19	17	6.3
10	113	91	61	39	18	125	579	67	24	17	15	6.3
11	102	91	58	37	18	95	452	62	22	15	14	5.5
12	91	83	56	56	18	66	325	66	22	16	13	4.9
13	83	76	58	56	18	50	268	69	19	14	13	4.6
14	76	72	62	53	18	45	242	67	19	13	13	4.6
15	67	67	59	53	18	39	280	64	17	12	13	4.9
16	59	69	56	53	18	38	253	58	17	13	13	4.4
17	53	66	56	50	18	38	207	52	16	13	12	4.6
18	49	64	50	49	18	257	172	49	15	13	11	7.1
19	45	62	50	48	18	308	146	52	15	12	10	7.1
20	42	59	49	45	18	249	128	50	15	11	12	6.3
21	40	56	49	40	18	462	113	48	16	11	12	6.3
22	37	53	48	37	18	1140	100	46	15	11	12	5.9
23	36	53	49	36	18	551	87	42	14	12	12	5.9
24	52	53	53	34	18	350	80	40	13	11	11	5.5
25	59	67	116	32	18	316	72	39	14	11	10	5.2
26	55	144	188	31	18	264	67	35	13	10	10	7.1
27	49	462	155	31	18	224	69	31	13	10	11	6.7
28	48	329	128	31	18	249	87	28	12	9.5	11	6.3
29	49	235	109	29	18	400	178	26	13	10	12	5.5
30	46	181	100	28	---	540	257	25	22	12	12	5.5
31	43	---	91	28	---	462	---	27	---	12	12	---
TOTAL	2354	3750	2563	1403	552	6607	6973	2196	604	458.5	418	201.7
MEAN	75.9	125	82.7	45.3	19.0	213	232	70.8	20.1	14.8	13.5	6.72
MAX	169	462	188	74	26	1140	579	224	34	23	20	11
MIN	36	41	48	28	18	18	67	25	12	9.5	10	4.4
MEAN≠	75.3	132	77.8	43.8	18.5	227	226	63.8	19.6	14.1	133	5.89
CFSM≠	1.26	2.20	1.30	.73	.31	3.81	3.79	1.07	.33	.24	.22	.10
IN.≠	1.45	2.46	1.50	.85	.33	4.39	4.23	1.23	.37	.27	.26	.11

CAL YR 1979 TOTAL 48583.0 MEAN 133 MAX 1200 MIN 10 MEAN≠ 132 CFSM≠ 2.21 IN.≠ 30.02
WTR YR 1980 TOTAL 28080.2 MEAN 76.7 MAX 1140 MIN 4.4 MEAN≠ 76.5 CFSM≠ 1.28 IN.≠ 17.46

≠ Adjusted for change in contents in Prompton Lake.

01429500 DYBERRY CREEK NEAR HONESDALE, PA

LOCATION.--Lat 41°36'25", long 75°16'00", Wayne County, Hydrologic Unit 02040103, on right bank 180 ft (55 m) upstream from unnamed tributary, 1,700 ft (518 m) downstream from General Edgar Jadwin Reservoir, 2.1 mi (3.4 km) north of Honesdale, and 2.6 mi (4.2 km) upstream from mouth.

DRAINAGE AREA.--64.6 mi^2 (167.3 km^2).

PERIOD OF RECORD.--October 1943 to current year. Published as "at Dyberry" October 1943 to September 1959 and as "near Dyberry" October 1959 to September 1961.

REVISED RECORDS.--WSP 1382: 1947(M), 1950(M), 1951-53.

GAGE.--Water-stage recorder. Datum of gage is 970.70 ft (295.869 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1957, nonrecording gage at site 1.9 mi (3.1 km) upstream at datum 13.70 ft (4.176 m) higher.

REMARKS.--Records fair. Flow regulated since 1960 by General Edgar Jadwin Reservoir (station 01429400) 1,700 ft (518 m) upstream.

AVERAGE DISCHARGE.--37 years, 115 ft^3/s (3.257^3/s), 24.13 in/yr (613 mm/yr), adjusted for storage since October 1959.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,500 ft^3/s (439 m^3/s) July 10, 1952, gage height, 14.6 ft (4.45 m), site and datum then in use, from rating curve extended above 2,500 ft^3/s (71 m^3/s) on basis of slope-area measurement at gage height 13.78 ft (4.200 m), site and datum then in use; no flow Oct. 2, 3, 1968, result of shutoff at General Edgar Jadwin Reservoir.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 23, 1942, reached a stage of 15.86 ft (4.834 m), site and datum then in use, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,070 ft^3/s (30.3 m^3/s) March 23, gage height, 4.72 ft (1.439 m); minimum, 1.1 ft^3/s (0.031 m^3/s) Sept. 25, gage height, 1.07 ft (0.326 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	136	46	300	71	24	19	442	256	21	34	6.7	4.0
2	131	82	210	76	22	18	361	193	21	24	7.4	3.4
3	184	597	160	69	21	17	287	182	23	23	14	3.2
4	217	271	120	65	21	17	499	156	28	19	10	2.7
5	166	162	94	64	21	17	351	137	21	17	6.7	2.7
6	329	129	90	48	18	19	238	117	17	54	5.7	2.5
7	138	114	84	53	18	26	198	113	20	28	6.0	2.2
8	109	103	76	53	19	95	187	102	27	19	5.1	2.0
9	96	92	69	43	18	133	480	91	26	15	4.6	1.8
10	116	98	64	41	18	117	482	81	29	13	4.4	1.7
11	88	99	62	50	18	81	309	75	28	12	5.1	1.8
12	78	91	61	91	18	65	241	87	22	15	4.8	2.0
13	78	85	73	62	18	47	214	89	16	14	4.6	2.2
14	67	80	76	63	18	39	298	88	15	9.6	4.4	2.7
15	57	72	58	66	18	47	458	84	14	8.6	4.6	2.4
16	54	78	62	62	18	39	320	68	17	11	4.2	1.4
17	50	73	56	58	18	48	225	59	12	12	4.2	1.5
18	46	72	50	56	18	200	190	57	12	12	4.2	3.4
19	43	64	44	55	18	600	163	67	13	10	4.4	3.0
20	42	60	51	52	19	300	144	60	13	8.6	4.0	2.4
21	39	57	50	50	20	500	130	53	12	7.4	4.2	2.1
22	41	55	54	47	22	1000	115	54	13	8.6	3.7	2.0
23	38	56	54	43	24	853	102	45	12	11	3.7	1.7
24	94	55	71	40	25	410	94	39	20	9.1	3.5	1.4
25	76	90	243	38	26	394	87	35	14	8.2	3.5	1.3
26	61	293	219	40	26	286	85	30	7.4	7.4	4.0	2.1
27	53	1010	127	39	22	309	84	26	8.2	7.0	4.2	2.2
28	56	800	103	36	20	323	131	24	11	6.7	5.1	2.1
29	59	600	90	32	20	685	362	22	14	7.0	6.3	2.0
30	53	420	84	29	---	547	383	21	78	7.4	19	1.8
31	50	---	76	26	---	421	---	20	---	7.0	6.3	---
TOTAL	2845	5904	3031	1618	586	7672	7660	2531	584.6	445.6	178.6	67.7
MEAN	91.8	197	97.8	52.2	20.2	247	255	81.6	19.5	14.4	5.76	2.26
MAX	329	1010	300	91	26	1000	499	256	78	54	19	4.0
MIN	38	46	44	26	18	17	84	20	7.4	6.7	3.5	1.3
MEAN≠	91.8	198	96.7	52.2	20.2	249	255	80.9	19.5	14.4	5.76	2.26
CFSM≠	1.42	3.06	1.50	.81	.31	3.85	3.95	1.25	.30	.22	.09	.03
IN.≠	1.64	3.42	1.73	.93	.34	4.44	4.40	1.44	.34	.26	.10	.04

CAL YR 1979 TOTAL 55670.9 MEAN 153 MAX 1490 MIN 9.9 MEAN≠ 153 CFSM≠ 2.36 IN.≠ 32.06
WTR YR 1980 TOTAL 33123.5 MEAN 90.5 MAX 1010 MIN 1.3 MEAN≠ 90.5 CFSM≠ 1.40 IN.≠ 19.07

≠ Adjusted for change in contents in General Edgar Jadwin Reservoir.

LACKAWAXEN RIVER BASIN

01431500 LACKAWAXEN RIVER AT HAWLEY, PA

LOCATION.--Lat 41°28'34", long 75°10'21", Wayne County, Hydrologic Unit 02040103, on left bank at Church Street Bridge in Hawley, 700 ft (213 m) upstream from Wallenpaupack Creek, and 3,000 ft (914 m) downstream from Middle Creek.

DRAINAGE AREA.--290 mi^2 (751 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1908 to September 1917, August 1938 to current year. Monthly discharge only for some periods, published in WSP 1302. October 1917 to December 1919, gage heights and discharge measurements only, in reports of Water Supply Commission of Pennsylvania.

REVISED RECORDS.--WSP 1051: 1938-41. WSP 1302: 1909-17. WSP 1432: 1942. WSP 1502: 1956.

GAGE.--Nonrecording gage, water-stage recorder, and crest-stage gage. Datum of gage is 869.00 ft (264.871 m) National Geodetic Vertical Datum of 1929. Prior to 1938, nonrecording gage at same site and datum. August 10, 1938, to August 19, 1955, water-stage recorder and August 20, 1955, to February 13, 1956, nonrecording gage at site 1,000 ft (305 m) downstream at same datum.

REMARKS.--Records fair. Regulation by Prompton Lake (station 01428900) and, at high flow, by General Edgar Jadwin Lake (station 01429400) located 14.9 mi (24.0 km) and 13.0 mi (20.9 km) upstream, respectively. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--51 years (1908-17, 1938-80), 487 ft^3/s (13.79 m^3/s), 22.80 in/yr (579 mm/yr), adjusted for storage since October 1959.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 51,900 ft^3/s (1,470 m^3/s) Aug. 19, 1955, gage height, 24.8 ft (7.56 m) at present site, 20.6 ft (6.28 m) at former site, from floodmark, from rating curve extended above 12,000 ft^3/s (340 m^3/s) on basis of slope-area measurement at gage height 24.2 ft (7.38 m) at present site, 20.1 ft (6.13 m) at former site; minimum daily, 8 ft^3/s (0.23 m^3/s) Sept. 8, 1909.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1936 reached a stage of 19.1 ft (5.82 m) at present site, 13.9 ft (4.24 m) at former site, from floodmarks, discharge, 27,600 ft^3/s (782 m^3/s).

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 4,480 ft^3/s (127 m^3/s) March 23; minimum discharge, 20 ft^3/s (0.57 m^3/s) Sept. 25, 26, gage height, 1.20 ft (0.366 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	345	198	679	381	115	150	1800	1210	139	195	57	77
2	722	224	580	363	113	144	1650	929	129	136	91	59
3	580	1750	497	332	113	139	1380	836	134	129	316	49
4	915	1390	444	290	109	136	1670	685	150	113	192	53
5	641	887	414	250	111	134	1800	575	134	98	120	54
6	1090	674	400	220	109	147	1310	502	117	144	106	49
7	685	565	381	195	109	180	1040	487	109	131	95	42
8	551	507	349	170	109	492	887	444	134	98	75	38
9	448	444	312	160	106	779	1200	385	139	87	65	35
10	463	429	285	250	106	536	2230	345	134	80	56	31
11	390	434	281	439	102	439	1790	324	131	70	52	27
12	340	395	266	434	102	336	1260	458	115	82	50	25
13	336	349	281	385	104	259	1040	492	102	80	47	25
14	285	336	354	381	109	289	1040	439	95	65	45	25
15	248	316	300	328	111	324	2070	405	87	56	44	25
16	238	328	273	277	115	281	1460	332	80	68	44	24
17	211	324	250	245	120	224	1040	308	82	75	43	22
18	198	312	230	234	125	1880	836	273	75	70	41	30
19	183	285	210	224	130	1710	703	285	71	70	45	29
20	171	262	210	217	140	1190	613	277	62	62	44	29
21	165	273	210	208	148	1620	551	255	70	52	39	25
22	156	248	210	200	156	1900	473	255	62	77	39	24
23	150	252	240	190	168	4480	414	227	62	102	39	24
24	266	252	308	180	186	4000	381	205	90	89	42	22
25	300	358	874	170	221	3630	345	189	71	68	36	20
26	245	1030	1100	174	227	3110	328	165	62	56	31	22
27	208	2800	741	162	177	2730	316	136	57	49	33	23
28	227	1590	575	150	160	2870	641	129	53	45	35	22
29	266	1060	512	134	160	3030	1620	126	57	47	35	22
30	234	810	473	129	---	3160	1690	124	304	78	231	22
31	214	---	429	117	---	1950	---	124	---	62	147	---
TOTAL	11471	19082	12668	7589	3861	42249	33578	11926	3107	2634	2335	974
MEAN	370	636	409	245	133	1363	1119	385	104	85.0	75.3	32.5
MAX	1090	2800	1100	439	227	4480	2230	1210	304	195	316	77
MIN	150	198	210	117	102	134	316	124	53	45	31	20
MEAN≠	369	644	403	243	133	1378	1113	377	103	84.3	75.2	31.6
CFSM≠	1.27	2.22	1.39	.84	.46	4.75	3.84	1.30	.36	.29	.26	.11
IN.≠	1.47	2.48	1.60	.97	.49	5.48	4.28	1.50	.40	.34	.30	.12

CAL YR 1979 TOTAL 226581 MEAN 621 MAX 5730 MIN 37 MEAN≠ 620 CFSM=/2.14 IN.≠ 29.01
WTR YR 1980 TOTAL 151474 MEAN 414 MAX 4480 MIN 20 MEAN≠ 414 CFSM=/1.43 IN.≠ 19.42

≠ Adjusted for change in contents in Prompton Lake and General Edgar Jadwin Reservoir.

01431500 LACKAWAXEN RIVER AT HAWLEY, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1973 to September 1974, June 1980 to July 1980.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT
JUN 23...	1645	68	118	8.9	26.5	36	18	12	1.5	4.5	21
JUL 23...	1600	104	118	8.9	28.0	36	7	12	1.4	4.0	19

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
JUN 23...	.3	1.4	18	11	6.9	.1	.9	68	50	.09
JUL 23...	.3	1.5	29	9.5	6.1	.1	1.7	61	54	.08

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)	PHOS-PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS PO4)
JUN 23...	12.5	.17	.060	.08	.58	.64	.81	.080	.060	.18
JUL 23...	17.1	.05	.100	.13	.78	.88	.93	.080	.040	.12

01432000 WALLENPAUPACK CREEK AT WILSONVILLE, PA

LOCATION.--At hydroelectric plant of Pennsylvania Power and Light Co., at lower end of penstock, at Kimble, 3 mi (5 km) east of dam which is at lat 41°27'33", long 75°11'08", Pike County, Hydrologic Unit 02040103, at Wilsonville, 1.2 mi (1.9 km) south of Hawley.

DRAINAGE AREA.--228 mi² (591 sq km).

PERIOD OF RECORD.--October 1909 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1302: 1918, 1923-24. WSP 1432: 1920-21. The mean discharge for September 1966 has been corrected to 141 ft³/s (3.99 m³/s), superseding figure published in WDR PA-66.

GAGE.--Daily discharge determined from flow through turbines, computed from records of generator output and flow over roller gates, computed on basis of head on gates. Prior to Nov. 3, 1925, nonrecording gage at site 1,000 ft (300 m) downstream from dam at datum 1,146.78 ft (349.539 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. No flow over spillway or roller gates. Flow regulated by Lake Wallenpaupack (station 01431700).

COOPERATION.--Records of generator load, operation of powerplant, net operating head, water-surface elevations in lake and daily discharges furnished by Pennsylvania Power and Light Co., in connection with a Federal Power Commission project.

AVERAGE DISCHARGE.--71 years, 366 ft³/s (10.37 m³/s), 21.77 in/yr (553 mm/yr), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 6,440 ft³/s (182 m³/s) June 30, 1973; no flow at times each year subsequent to Nov. 3, 1925.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	522	.00	.00	28	1070	7.0	925	1200	.00	7.0	378	.00
2	481	.00	.00	949	.00	.00	1130	1220	273	219	.00	245
3	240	.00	964	931	.00	615	1690	14	215	234	.00	278
4	488	.00	953	983	301	280	1700	.00	.00	.00	888	300
5	487	.00	957	.00	241	259	937	1090	.00	.00	762	248
6	.00	.00	484	.00	244	241	949	1430	.00	.00	613	.00
7	.00	.00	469	769	152	229	448	476	.00	488	746	.00
8	960	.00	.00	730	272	.00	477	473	.00	473	915	239
9	959	.00	.00	718	.00	.00	897	491	467	484	.00	266
10	972	.00	485	757	.00	254	1220	.00	476	641	.00	247
11	952	.00	472	727	243	210	1820	.00	446	484	307	263
12	948	.00	480	.00	235	253	.00	476	494	18	485	255
13	.00	.00	200	.00	245	976	.00	23	496	.00	480	.00
14	.00	.00	508	481	263	.00	1190	.00	.00	660	496	.00
15	986	.00	.00	485	267	.00	1230	.00	.00	698	476	754
16	980	.00	.00	33	.00	.00	1830	.00	474	865	.00	734
17	1160	.00	749	724	.00	.00	1840	.00	270	600	.00	739
18	1140	.00	944	740	.00	72	1830	.00	255	461	234	743
19	1140	.00	937	.00	252	.00	4.0	268	268	.00	125	729
20	.00	.00	944	.00	449	.00	.00	.00	236	12	257	.00
21	.00	.00	950	473	235	23	1000	.00	.00	896	226	.00
22	1140	8.9	.00	482	260	.00	927	26	.00	479	258	780
23	1200	.00	.00	534	.00	.00	933	49	477	489	.00	707
24	1150	.00	.00	467	.00	465	951	.00	199	476	.00	712
25	1140	.00	.00	492	260	735	944	.00	237	471	245	756
26	1120	.00	913	.00	251	728	.00	.00	244	.00	246	733
27	.00	23	948	.00	432	742	.00	235	233	.00	244	.00
28	16	924	931	228	245	781	939	.00	.00	202	237	.00
29	44	950	.00	231	543	.00	1190	.00	.00	256	235	744
30	.00	948	.00	484	---	.00	1210	.00	155	242	.00	740
31	.00	---	951	245	---	880	---	.00	---	248	16	---
TOTAL	18225.00	2853.90	14239.00	12691.00	6460.00	7750.00	28211.00	7471.00	5915.00	10103.00	8869.00	11212.00
MEAN	588	95.1	459	409	223	250	940	241	197	326	286	374
MAX	1200	950	964	983	1070	976	1840	1430	496	896	915	780
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

CAL YR 1979 TOTAL 171576.90 MEAN 470 MAX 1810 MIN .00
WTR YR 1980 TOTAL 133999.90 MEAN 366 MAX 1840 MIN .00

LAKES AND RESERVOIRS IN LACKAWAXEN RIVER BASIN

01428900 PROMPTON RESERVOIR.--Lat 41°35'18", long 75°19'39", Wayne County, Hydrologic Unit 02040103, at dam on West Branch Lackawaxen River, 0.3 mi (0.5 km) north of Prompton, 0.4 mi (0.6 km) upstream from highway bridge and 0.5 mi (0.8 km) upstream from Van Auken Creek. DRAINAGE AREA, 59.6 mi^2 (154 km^2). PERIOD OF RECORD, December 1960 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Reservoir formed by an earth and rockfill dam with ungated bedrock spillway at elevation 1,205.00 ft (367.284 m). Storage began July 1960. Capacity at elevation 1,205.00 ft (367.284 m) is 51,700 acre-ft (63.7 hm^3). Ordinary minimum (conservation) pool elevation, 1,125.00 ft (342.900 m), capacity, 3,420 acre-ft (4.22 hm^3). Reservoir is used for flood control and recreation. Figures given herein represent total contents. Regulation is accomplished by discharge through an ungated tunnel. Records furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 8,170 acre-ft (10.1 hm^3) June 29, 1973, elevation, 1,138.40 ft (346.984 m); minimum (after first filling), 2,920 acre-ft (3.60 hm^3) Sept. 27, 1964, elevation, 1,123.20 ft (342.351 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 4,770 acre-ft (5.88 hm^3) Mar. 22, elevation, 1,129.48 ft (344.265 m); minimum, 3,450 acre-ft (4.25 hm^3) Sept. 15, elevation, 1,125.10 ft (342.930 m).

01429400 GENERAL EDGAR JADWIN RESERVOIR.--Lat 41°36'44", long 75°15'55", Wayne County, Hydrologic Unit 02040103, at dam on Dyberry Creek, 0.45 mi (0.72 km) upstream from unnamed tributary, 2.4 mi (3.9 km) north of Honesdale, and 2.9 mi (4.7 km) upstream from mouth. DRAINAGE AREA, 64.5 mi^2 (167.1 km^2). PERIOD OF RECORD, October 1959 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Reservoir formed by an earth and rockfill dam with ungated, concrete spillway at elevation 1,053.00 ft (320.954 m). Storage began in October 1959. Capacity at elevation 1,053.00 ft (320.954 m) is 24,500 acre-ft (30.2 hm^3). Reservoir is used for flood control. Figures given herein represent total contents. Regulation is accomplished by discharge through an ungated tunnel. Records furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 6,520 acre-ft (8.04 hm^3) June 19, 1973, elevation, 1,017.40 ft (310.104 m); no storage many times.

EXTREMES FOR CURRENT YEAR: Maximum contents, 430 acre-ft (5.30 hm^3) Mar. 23, elevation, 988.00 ft (301.142 m); no storage many times.

01431700 LAKE WALLENPAUPACK.--Lat 41°27'35", long 75°11'10", Wayne County, Hydrologic Unit 02040103, at dam on Wallenpaupack Creek, at Wilsonville, 1.2 mi (1.9 km) south of Hawley and 1.5 mi (2.4 km) upstream from mouth. DRAINAGE AREA, 228 mi^2 (591 km^2). PERIOD OF RECORD, January 1926 to current year. GAGE, vertical staff. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Pennsylvania Power and Light Co.).

Reservoir formed by concrete gravity-type and earthfill dam, with concrete spillway at elevation 1,176.00 ft (358.445 m) in two sections. Spillway equipped with roller gate, 14 ft (4.3 m) high on each section. Storage began Nov. 3, 1925; water in reservoir first reached minimum pool elevation in January 1926. Total capacity at elevation 1,190.00 ft (362.712 m), top of gates, is 209,300 acre-ft (258 hm^3), of which 157,800 acre-ft (195 hm^3) is controlled storage above elevation 1,160.00 ft (353.568 m), minimum pool. Reservoir is used for generation of hydroelectric power. Figures given herein represent usable contents. Records furnished by Pennsylvania Power and Light Co.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 178,200 acre-ft (220 hm^3) Aug. 19-21, 1955, elevation, 1,193.45 ft (363.764 m); minimum (after first filling), 12,280 acre-ft (15.1 hm^3) Mar. 28, 1958, elevation, 1,162.60 ft (354.360 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 137,080 acre-ft (169 hm^3) June 8 elevation, 1,186.40 ft (361.615 m); minimum, 69,600 acre-ft (85.8 hm^3) Sept. 30, elevation, 1,174.00 (357.835 m).

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in cfs)	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in cfs)
	01428900 Prompton Reservoir			01429400 General Edgar Jadwin Reservoir		
Sept. 30	1125.57	3580	--	974.98	0	--
Oct. 31	1125.43	3540	- 0.7	975.92	0	--
Nov. 30	1126.83	3930	+ 6.6	980.60	68	+ 1.1
Dec. 31	1125.75	3630	- 4.9	976.55	0	- 1.1
CAL YR 1979	--	--	- 1.1	--	--	0
Jan. 31	1125.42	3540	- 1.5	975.20	0	0
Feb. 29	1125.34	3510	- 0.5	975.10	0	0
Mar. 31	1128.25	4380	+ 14.1	980.85	76	+ 1.2
Apr. 30	1127.11	4010	- 6.2	979.94	48	- .5
May 31	1125.58	3580	- 7.0	975.10	0	- .8
June 30	1125.45	3550	- 0.5	975.90	0	0
July 31	1125.32	3510	- 0.6	974.44	0	0
Aug. 31	1125.30	3500	- 0.2	974.37	0	0
Sept. 30	1125.12	3450	- 0.8	974.24	0	0
WTR YR 1980	--	--	- 0.2	--	--	0
	01431700 Lake Wallenpaupack					
Sept. 30	1178.9	95660	--			
Oct. 31	1177.9	90260	- 87.8			
Nov. 30	1182.9	117450	+ 457.0			
Dec. 31	1181.8	111400	+ 98.4			
CAL YR 1979	--	--	+ 27.0			
Jan. 31	1179.1	96740	- 238.4			
Feb. 29	1177.5	88100	- 150.2			
Mar. 31	1184.3	125280	+ 604.6			
Apr. 30	1185.4	131440	+ 103.5			
May 31	1186.1	135370	+ 63.9			
June 30	1184.9	128640	- 113.0			
July 31	1182.0	112500	- 262.5			
Aug. 31	1178.8	95120	- 282.6			
Sept. 30	1174.0	69600	- 428.9			
WTR YR 1980	--	--	- 35.9			

01434000 DELAWARE RIVER AT PORT JERVIS, NY

LOCATION.--Lat 41°22'14", long 74°41'52", Pike County, Pa., Hydrologic Unit 02040104, on right bank 250 ft (76 m) downstream from bridge (on U.S. Highways 6 and 209) between Port Jervis, N.Y. and Matamoras, Pa., 1.2 mi (1.9 km) upstream from Neversink River, and 6.5 mi (10.5 km) downstream from Mongaup River. Water-quality sampling site at discharge station.

DRAINAGE AREA.--3,076 mi² (7,967 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1904 to current year.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1031: 1905-36. WRD NY 1971: 1970.

GAGE.--Water-stage recorder. Datum of gage is 415.35 ft (126.599 m) National Geodetic Vertical Datum of 1929. October 1904 to August 13, 1928, nonrecording gage at bridge 250 ft upstream at present datum; operated by U.S. Weather Bureau prior to June 20, 1914.

REMARKS.--Records good. Flow regulated by Lake Wallenpaupack and by Toronto, Cliff Lake, and Swinging Bridge Reservoirs (see Reservoirs in Delaware River Basin) and smaller reservoirs. Large diurnal fluctuations at medium and low flows caused by powerplants on tributary streams. Subsequent to September 1954, entire flow from 371 mi² (961 km²) of drainage area controlled by Pepacton Reservoir, and subsequent to October 1963, entire flow from 454 mi² (1,176 km²) of drainage area controlled by Cannonsville Reservoir (see Reservoirs in Delaware River Basin). Part of flow from these reservoirs diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 233,000 ft³/s (6,600 m³/s) Aug. 19, 1955, gage height, 23.91 ft (7.288 m), from floodmarks in gage house, from rating curve extended above 89,000 ft³/s (2,520 m³/s) on basis of slope-area measurement of peak flow; minimum observed, 175 ft³/s (4.96 m³/s) Sept. 23, 1908, gage height, 0.6 ft (0.18 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--The U.S. Weather Bureau reported a discharge of 205,000 ft³/s (5,810 m³/s) Oct. 10, 1903, gage height, 23.1 ft (7.04 m), from rating curve extended above 70,000 ft³/s (1,980 m³/s) by velocity-area studies; stage on Mar. 8, 1904, was 25.5 ft (7.77 m), ice jam.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 73,400 ft³/s (2,080 m³/s) Mar. 22, gage height, 12.28 ft (3.743 m); minimum, 869 ft³/s (24.6 m³/s) Jan. 31, gage height, 1.78 ft (0.543 m); minimum daily, 1,110 ft³/s (31.4 m³/s) May 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2550	2260	7500	3510	2010	2200	15300	14500	1430	3350	1520	1840
2	6370	2230	6290	2990	2100	1500	14600	12500	1640	2550	1820	1650
3	6250	6260	6190	3600	1410	1400	13300	10900	1800	2230	1970	1640
4	7020	11100	6410	3340	1620	2200	13000	8840	1890	1880	2250	1680
5	6690	7780	6000	2800	1800	1810	14200	7220	1460	1350	2740	1720
6	10100	6410	5540	1900	1700	1660	12100	7090	1640	1430	2560	1740
7	10500	5450	4620	1980	1800	1460	10500	7480	1860	1960	2280	1830
8	8080	4810	3720	2740	1600	1710	8970	5290	1870	2280	2190	1550
9	7190	4200	3030	2780	1800	3000	9590	4330	1610	2060	2040	1510
10	6930	3520	3240	2660	1600	3840	20500	3330	2010	2010	1420	1580
11	6590	3480	3730	2630	1400	2950	20200	3280	2270	2030	1510	1550
12	5920	3440	3650	2790	1600	2650	15200	4370	1930	1730	1650	1700
13	5310	3330	3470	2700	1600	2320	13000	3670	1570	1740	1650	1860
14	4290	3030	3840	2770	1400	2460	12600	3700	1400	1530	1710	1710
15	3930	2680	3410	2690	1500	1500	16000	3260	1560	1940	1790	1690
16	4540	2540	2620	2510	1800	1270	16700	2740	1500	1980	1810	1740
17	4450	2630	2680	2520	1500	1720	14200	2290	1860	2070	1630	1860
18	4250	2360	3460	2910	1500	4640	12400	2120	1730	1850	1370	1920
19	3740	2240	3570	2450	1400	12200	10300	2530	1700	1480	1520	2080
20	3040	2270	2970	1830	1600	8770	8470	2370	1660	1350	1270	1930
21	2050	2410	2990	1750	1800	12600	7800	2290	1630	1490	1440	1690
22	2230	2200	2970	2080	1400	59100	7780	2190	1830	2280	1430	1670
23	3180	1960	2220	2380	1900	25500	6720	2000	1640	1880	1640	1830
24	3600	2050	2160	2180	1400	15500	6180	1770	1680	1950	1580	1620
25	4310	2030	3270	2330	1180	14800	5680	1550	1680	1750	1530	1720
26	4450	4290	6820	2080	1300	13400	5170	1390	1760	1720	1850	1700
27	2790	28700	6110	1770	1400	10600	3590	1370	1620	1540	1850	1640
28	2060	18200	5130	1910	1700	9900	3540	1260	1680	1330	1890	1690
29	2230	11900	4280	1650	1600	11100	8070	1110	1730	1280	1850	1550
30	2540	9240	3380	1440	---	15500	14500	1240	2450	1240	1900	1780
31	2410	---	3460	1510	---	15700	---	1400	---	1780	1920	---
TOTAL	149590	165000	128730	75180	46420	264960	340160	129380	52090	57040	55580	51670
MEAN	4825	5500	4153	2425	1601	8547	11340	4174	1736	1840	1793	1722
MAX	10500	28700	7500	3600	2100	59100	20500	14500	2450	3350	2740	2080
MIN	2050	1960	2160	1440	1180	1270	3540	1110	1400	1240	1270	1510

CAL YR 1979 TOTAL 2204670 MEAN 6040 MAX 63000 MIN 1210
WTR YR 1980 TOTAL 1515800 MEAN 4142 MAX 59100 MIN 1110

01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957-60, 1964 to current year.
CHEMICAL DATA: 1958-59 (c), 1964-65 (c), 1966 (a), 1967-68 (c), 1969-76 (d).
MINOR ELEMENTS DATA: 1970 (a), 1972-73 (a), 1974-76 (c).
PESTICIDE DATA: 1974 (a).
ORGANIC DATA: OC--1974 (b), 1975 (d).
NUTRIENT DATA: 1968 (a), 1969-76 (d).
BIOLOGICAL DATA:
Bacteria--1973-76 (d).
Phytoplankton--1974 (b), 1975-76 (c).
Periphyton--1976 (a).
SEDIMENT DATA: 1959 (c), 1976 (c).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1973 to September 1973.
WATER TEMPERATURES: February 1957 to September 1960, January 1973 to September 1973, June 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: February 1957 to September 1960, March 1970 to June 1976.

INSTRUMENTATION.--Temperature recorder since January 1973.

REMARKS.--No temperature record May 23-27, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1957-59, 1973-80), 29.5°C July 19, 1959, Aug. 3, 1975; minimum (water years 1958-60, 1973, 1975-80), freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 28.0°C July 21; minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.0	16.0	16.5	8.5	7.0	8.0	4.5	3.5	4.0	1.5	.0	1.0
2	16.5	15.5	16.0	10.5	8.5	9.5	3.5	2.0	2.5	1.0	.0	.5
3	16.5	16.0	16.5	10.5	8.5	9.5	2.0	1.5	2.0	1.0	.0	.5
4	16.0	15.5	16.0	8.5	7.5	8.0	3.0	1.5	2.5	.5	.0	.0
5	16.0	15.5	16.0	7.5	6.5	7.0	3.5	2.5	3.0	.5	.0	.0
6	15.5	14.5	14.5	7.0	6.5	6.5	4.0	3.0	3.5	1.0	.0	.0
7	14.5	13.0	13.5	7.0	6.5	7.0	4.5	3.5	4.0	.0	.0	.0
8	14.0	12.0	12.5	7.0	6.5	6.5	4.5	3.0	4.0	.5	.0	.0
9	12.5	11.5	12.0	7.5	6.5	7.0	3.0	2.0	2.5	.5	.0	.0
10	11.5	10.0	11.0	8.0	7.5	8.0	2.5	2.0	2.5	.5	.0	.0
11	10.0	9.5	10.0	8.0	7.5	7.5	5.0	2.5	3.0	.5	.0	.0
12	10.0	9.5	10.0	8.0	7.5	7.5	4.5	3.0	4.0	.5	.0	.0
13	11.0	9.5	10.0	7.5	7.5	7.5	4.5	4.0	4.5	.5	.0	.0
14	10.0	8.5	9.0	7.5	6.5	7.5	4.0	3.0	3.5	.0	.0	.0
15	9.0	8.0	8.5	6.5	5.5	6.0	2.5	2.0	2.5	1.0	.0	.5
16	10.5	8.5	9.5	5.5	4.0	5.0	2.0	1.0	2.0	1.0	.0	.5
17	10.5	9.5	10.0	5.0	3.5	4.5	2.0	.0	1.0	1.0	.0	.5
18	12.0	9.5	11.0	5.5	4.0	4.5	.5	.0	.0	1.5	.5	1.0
19	12.5	11.0	11.5	5.5	4.0	5.0	.5	.0	.0	1.5	1.0	1.5
20	13.5	11.5	12.5	6.0	4.5	5.5	.0	.0	.0	1.5	.5	1.0
21	15.0	13.0	14.0	6.5	5.5	6.0	.5	.0	.0	1.0	.0	.5
22	16.0	14.0	15.0	7.0	6.5	6.5	1.0	.0	.5	.0	.0	.0
23	16.0	15.0	15.5	7.5	6.5	7.0	1.5	1.0	1.5	1.0	.0	.5
24	15.5	13.5	14.5	9.0	7.5	8.5	1.5	1.5	1.5	1.0	.0	.0
25	13.5	11.5	12.5	10.0	9.0	9.5	3.0	1.5	2.5	.5	.0	.0
26	11.5	10.0	11.0	12.0	10.0	11.0	2.5	2.0	2.0	.5	.0	.0
27	10.0	8.0	9.0	11.0	10.0	10.5	2.0	1.5	2.0	.5	.0	.0
28	8.0	7.0	7.5	10.0	8.0	8.5	2.0	1.5	1.5	.5	.0	.0
29	7.5	7.0	7.0	8.0	6.0	7.0	2.5	2.0	2.0	.0	.0	.0
30	8.0	7.5	7.5	6.0	4.0	5.0	2.0	1.5	2.0	.5	.0	.0
31	8.0	7.0	7.5	---	---	---	1.5	1.0	1.0	.5	.0	.0
MONTH	17.0	7.0	12.0	12.0	3.5	7.0	5.0	.0	2.0	1.5	.0	.5

01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.0	.0	.0	.0	.0	.0	4.5	3.0	4.0	12.0	10.0	11.0
2	.5	.0	.0	.0	.0	.0	5.5	4.0	4.5	13.0	11.5	12.0
3	.0	.0	.0	.0	.0	.0	5.5	4.0	5.0	14.0	12.0	13.0
4	.0	.0	.0	.0	.0	.0	6.0	5.5	5.5	15.0	13.5	14.0
5	.0	.0	.0	.0	.0	.0	6.0	5.5	6.0	15.5	13.5	14.5
6	.0	.0	.0	.5	.0	.0	6.5	5.5	6.0	15.0	14.0	14.5
7	.0	.0	.0	.5	.0	.0	7.5	6.0	7.0	16.0	14.5	15.5
8	.5	.0	.0	.0	.0	.0	8.0	7.0	7.5	15.0	14.0	14.5
9	.0	.0	.0	.5	.0	.0	8.0	8.0	8.0	14.5	12.5	13.5
10	.0	.0	.0	.5	.0	.0	8.5	8.0	8.0	14.0	11.5	13.0
11	.0	.0	.0	.5	.0	.0	8.5	7.5	8.0	13.0	12.5	13.0
12	.0	.0	.0	.5	.0	.0	8.5	7.5	8.0	14.0	12.5	13.5
13	.5	.0	.0	.0	.0	.0	9.0	8.0	8.5	15.0	13.5	14.5
14	.0	.0	.0	.0	.0	.0	9.0	7.5	8.5	16.5	14.0	15.5
15	.0	.0	.0	1.0	.0	.5	8.0	7.5	7.5	17.0	14.5	15.5
16	.0	.0	.0	2.0	.0	1.0	8.0	6.5	7.5	16.5	13.5	15.0
17	.5	.0	.0	3.0	.5	1.0	6.5	5.5	6.0	17.5	14.0	16.0
18	.0	.0	.0	2.0	.5	1.5	7.5	6.0	6.5	16.5	15.5	15.5
19	.0	.0	.0	1.0	.0	.5	8.5	6.5	7.5	17.5	15.0	16.5
20	.0	.0	.0	2.0	.5	1.0	9.5	8.0	9.0	18.5	16.0	17.5
21	.0	.0	.0	2.5	1.0	2.0	11.0	9.0	10.0	17.5	16.5	17.0
22	.0	.0	.0	1.5	.5	1.0	11.0	9.0	10.0	19.0	16.0	17.5
23	.0	.0	.0	2.5	1.0	2.0	11.5	9.5	10.5	---	---	---
24	.0	.0	.0	3.0	2.0	2.5	12.5	10.5	11.5	---	---	---
25	.0	.0	.0	3.0	3.0	3.0	12.0	11.5	12.0	---	---	---
26	.0	.0	.0	3.0	2.5	3.0	12.5	11.5	12.0	---	---	---
27	.0	.0	.0	4.0	2.5	3.0	12.0	11.0	11.5	---	---	---
28	.0	.0	.0	4.5	3.5	4.0	11.0	9.5	10.5	20.5	17.0	19.0
29	.0	.0	.0	4.5	4.5	4.5	9.5	9.0	9.0	21.5	18.0	19.5
30	---	---	---	4.5	4.0	4.0	10.0	9.0	9.5	20.0	19.0	19.5
31	---	---	---	4.0	3.5	4.0	---	---	---	21.0	19.0	20.0
MONTH	.5	.0	.0	4.5	.0	1.0	12.5	3.0	8.0	21.5	10.0	15.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	23.5	20.0	21.5	21.0	19.0	20.0	25.0	23.5	24.5	24.0	22.5	23.5
2	23.0	21.5	22.0	20.5	19.5	20.0	26.0	23.5	24.5	24.5	23.0	24.0
3	23.0	21.0	22.0	20.5	19.5	20.0	25.5	23.5	24.5	24.0	22.5	23.5
4	21.5	20.0	21.0	23.0	19.5	21.0	26.0	24.0	25.0	23.5	22.0	23.0
5	22.0	19.0	20.5	22.5	21.0	22.0	25.5	23.5	24.5	23.5	22.0	22.5
6	21.5	19.0	20.5	23.0	21.0	22.0	24.5	23.0	24.0	23.5	21.5	22.5
7	21.0	19.5	20.0	23.0	20.0	21.5	25.5	23.0	24.5	23.0	21.5	22.0
8	21.0	18.5	20.0	22.0	20.5	21.0	26.0	24.0	25.0	21.5	20.0	21.0
9	18.5	16.0	17.0	23.5	20.0	22.0	26.0	25.0	25.5	20.5	19.5	20.0
10	16.5	15.0	16.0	24.5	21.5	23.0	25.5	24.0	25.0	21.0	20.0	20.5
11	16.5	15.0	16.0	24.0	21.5	23.0	26.0	25.0	25.5	20.5	19.0	20.0
12	18.5	14.5	17.0	24.0	21.5	23.0	25.5	24.5	25.0	20.0	19.0	19.5
13	20.0	16.5	18.5	24.0	21.0	22.5	25.0	23.0	24.0	20.0	19.0	19.5
14	21.5	18.0	20.0	25.0	22.0	23.5	24.0	22.5	23.0	20.5	19.5	20.0
15	23.0	20.5	22.0	24.5	22.5	23.5	23.0	22.0	22.5	20.5	18.5	19.5
16	23.0	21.0	22.0	25.0	22.0	23.5	22.5	21.5	22.0	18.5	17.0	18.0
17	23.0	20.0	21.5	25.5	23.0	24.5	22.5	20.5	21.5	19.0	17.0	17.5
18	22.0	19.5	21.0	26.5	23.0	24.5	22.0	21.0	22.0	18.5	18.0	18.5
19	23.0	19.0	21.0	26.0	23.5	25.0	21.5	21.0	21.5	18.5	17.0	18.0
20	22.0	19.0	20.0	27.0	24.5	26.0	22.0	21.0	21.5	19.0	17.5	18.0
21	21.5	18.0	19.5	28.0	26.0	27.0	21.5	20.5	21.0	20.0	18.5	19.5
22	21.5	18.5	20.0	27.5	24.5	26.0	21.5	20.5	21.0	21.5	19.5	20.5
23	22.5	20.0	21.5	25.5	23.5	24.5	22.5	20.5	21.5	21.5	20.5	21.0
24	24.0	20.5	22.5	25.5	23.0	24.5	22.5	21.0	22.0	20.5	19.0	19.5
25	25.0	22.0	23.5	25.5	22.5	24.0	23.5	21.5	22.5	19.0	17.0	18.0
26	26.0	23.0	24.5	25.5	23.0	24.5	24.0	22.0	23.0	17.5	17.0	17.0
27	26.0	23.0	24.5	26.5	24.0	25.0	24.5	22.5	23.5	17.0	15.5	16.0
28	24.5	22.5	24.0	26.0	24.5	25.0	24.5	23.0	24.0	15.5	14.5	15.0
29	23.0	21.5	22.0	25.0	24.0	24.5	24.5	23.0	24.0	15.5	14.0	14.5
30	22.0	20.5	21.5	25.0	23.5	24.5	24.5	23.0	24.0	16.5	14.5	15.0
31	---	---	---	25.0	23.0	24.0	24.5	23.0	24.0	---	---	---
MONTH	26.0	14.5	21.0	28.0	19.0	23.5	26.0	20.5	23.5	24.5	14.0	19.5

01438500 DELAWARE RIVER AT MONTAGUE, NJ

LOCATION.--Lat 41°18'33", long 74°47'44", Sussex County, Hydrologic Unit 02040104, on right bank 0.4 mi (0.6 km) upstream from toll bridge on U.S. Route 206 at Montague, 0.8 mi (1.3 km) downstream from Sawkill Creek, and at mile 246.3 (396.3 km). Water-quality samples collected from toll bridge.

DRAINAGE AREA.--3,480 mi² (9,013 km²).

PERIOD OF RECORD.--March 1936 to September 1939 (gage heights only, published as "at Milford, PA"). October 1939 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 369.93 ft (112.755 m) National Geodetic Vertical Datum of 1929. Prior to Feb. 9, 1940, nonrecording gage on upstream side of left span of subsequently dismantled bridge at present site at datum 70 ft (21.3 m) lower.

REMARKS.--Water-discharge records good. Diurnal fluctuations at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack and by Pepacton, Cannonsville, Swinging Bridge, Toronto, Cliff Lake, and Neversink Reservoirs (see Delaware River Basin, reservoirs in) and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoirs (see Delaware River Basin, diversions).

AVERAGE DISCHARGE.--41 years, 5,931 ft³/s (168.0 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 250,000 ft³/s (7,080 m³/s) Aug. 19, 1955, gage height, 35.15 ft (10.714 m), from rating curve extended above 90,000 ft³/s (2,550 m³/s) on basis of flood-routing study; minimum, 382 ft³/s (10.8 m³/s) Aug. 24, 1954, gage height, 3.83 ft (1.167 m), minimum daily, 412 ft³/s (11.7 m³/s) Aug. 23, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of October 10, 1903, reached a stage of 35.5 ft (10.82 m) from floodmark, present datum.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 69,800 ft³/s (1,980 m³/s) Mar. 22, gage height, 18.48 ft (5.633 m); minimum, 1,030 ft³/s (29.2 m³/s) Sept. 25, gage height, 4.48 ft (1.366 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2920	2840	8750	4370	1550	2400	17700	15200	1740	3800	1800	1990
2	8110	2730	7320	3340	2300	1650	17000	13100	1730	3030	2070	1800
3	7990	6130	6930	4070	1500	1600	15700	11200	2230	2620	2160	1870
4	8360	12900	7230	3650	1750	2300	15100	8840	2220	2280	2480	1720
5	8290	9160	6810	3400	2000	1900	16500	7840	1740	1660	2930	1910
6	13100	7470	6370	2200	1850	1800	14300	8620	1870	1750	2990	1740
7	13100	6400	5420	2100	1900	1700	12300	7140	2080	2010	2640	1980
8	9840	5650	4700	3100	1750	1800	10500	6230	2210	2620	2560	1710
9	8830	5050	3760	3000	1950	3100	11300	5370	1850	2360	2490	1650
10	8210	4280	3680	3000	1700	4000	23300	4690	2260	2250	1640	1680
11	7960	4220	4320	2900	1600	3700	23200	3920	2540	2320	1640	1640
12	7100	4170	4240	3100	1750	2900	17900	4340	2270	2100	1880	1760
13	6560	4060	4170	3040	1750	2500	15300	4970	1900	1990	1870	1930
14	5390	3800	4300	3030	1600	3000	14500	4360	1690	1610	1780	1820
15	4720	3390	4180	3100	1650	1850	17800	4310	1710	2180	2000	1720
16	5370	3160	3270	3000	1950	1600	18600	3650	1650	2190	1990	1950
17	5240	3210	3120	2700	1700	1850	15900	3100	2030	2340	1790	1910
18	5030	2980	3800	3310	1700	4900	13900	2730	1990	2110	1490	2160
19	4540	2790	4100	3000	1600	13600	11400	2800	1880	1860	1700	2130
20	4000	2760	3400	2190	1800	10100	9470	3110	1920	1540	1370	2130
21	2770	2890	3400	1890	2000	12700	8850	2910	1820	1550	1490	1790
22	2670	2750	3600	2280	1650	58300	8490	2770	2030	2590	1550	1720
23	3750	2420	2800	2670	2100	30500	7290	2590	1810	2170	1660	2050
24	4160	2510	2730	2560	1750	20100	6780	2330	1920	2230	1660	1720
25	4830	2430	3600	2500	1350	18300	6230	1990	1830	2070	1640	1730
26	5160	4590	7510	2400	1450	16900	5400	1800	1920	2040	1890	1850
27	3560	27100	7100	2000	1450	13800	4130	1620	1840	1780	1990	1780
28	2640	20500	5970	2000	1900	12400	5900	1700	1840	1600	1980	1690
29	2760	13900	5210	1950	1700	13400	14800	1410	1910	1560	2000	1610
30	3140	10700	4090	1600	---	17900	17500	1470	2940	1490	1960	1960
31	2990	---	3940	1850	---	18000	---	1660	---	1940	2020	---
TOTAL	183090	186940	149820	85300	50700	300550	397040	147770	59370	65640	61110	55100
MEAN	5906	6231	4833	2752	1748	9695	13230	4767	1979	2117	1971	1837
MAX	13100	27100	8750	4370	2300	58300	23300	15200	2940	3800	2990	2160
MIN	2640	2420	2730	1600	1350	1600	4130	1410	1650	1490	1370	1610

CAL YR 1979 TOTAL 2475590 MEAN 6782 MAX 57200 MIN 1500
WTR YR 1980 TOTAL 1742430 MEAN 4761 MAX 58300 MIN 1350

01439500 BUSH KILL AT SHOEMAKERS, PA

LOCATION.--Lat 41°05'17", long 75°02'17", Monroe County, Hydrologic Unit 02040104, on right bank 30 ft (9 m) downstream from highway bridge, 0.1 mi (0.2 km) downstream from Saw Creek, 0.7 mi (1.1 km) northwest of Shoemakers, and 2 mi (3.2 km) southwest of Bushkill.

DRAINAGE AREA.--117 mi^2 (303 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1908 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to October 1928, published as Bushkill Creek near Shoemakers; October 1928 to September 1952, published as Bushkill Creek at Shoemakers.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1202: 1921, 1932(M), 1933, 1935-36, 1938(M), 1939-40, 1942, 1945, 1946(M), 1948(M). WSP 1302: 1909-15, 1920(M), 1922-29.

GAGE.--Water-stage recorder. Datum of gage is 421.13 ft (128.360 m) National Geodetic Vertical Datum of 1929. Sept. 19, 1908, to Aug. 12, 1938, nonrecording gage, and Aug. 13, 1938, to June 20, 1956, water-stage recorder at site 50 ft (15 m) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--72 years, 237 ft^3/s (6.712 m^3/s), 27.46 in/yr (697 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,400 ft^3/s (663 m^3/s) Aug. 19, 1955, gage height, 13.95 ft (4.252 m), from floodmarks, from rating curve extended above 2,600 ft^3/s (73.6 m^3/s) on basis of slope-area measurement of peak flow; minimum, 2.6 ft^3/s (0.074 m^3/s) Sept. 25, 26, 27, 1964, gage height, 0.72 ft (0.219 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,100 ft^3/s (31.2 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 6	0130	1,300	36.8	3.51	1.070	Mar. 22	0130	*2,670	75.6	*4.97	1.515
Nov. 26	2200	1,390	39.4	3.63	1.106	Apr. 10	1100	1,180	33.4	3.36	1.024

Minimum discharge, 5.6 ft^3/s (0.16 m^3/s) Sept. 15, 16, gage height, 0.85 ft (0.259 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	416	167	506	201	83	58	669	671	111	66	35	7.6
2	770	175	427	194	80	58	665	565	108	49	29	7.6
3	802	484	364	187	77	58	593	514	138	49	38	8.4
4	942	427	327	154	74	58	626	426	133	53	30	8.8
5	909	355	304	140	70	58	603	363	110	86	24	8.4
6	1190	322	288	125	68	58	506	321	103	153	21	9.2
7	957	298	279	110	65	62	437	293	100	98	21	8.8
8	794	271	260	100	64	84	388	276	103	75	19	8.8
9	666	251	235	90	63	105	612	250	95	68	17	8.0
10	599	263	217	83	64	82	1120	227	98	59	17	7.6
11	548	267	205	150	65	102	950	217	88	51	17	6.8
12	489	275	198	290	65	96	776	237	81	69	19	6.5
13	443	258	226	219	64	77	645	253	77	55	17	6.2
14	377	254	246	216	63	86	617	226	73	42	16	6.2
15	328	233	209	201	62	100	848	194	66	36	15	5.9
16	290	224	194	193	60	90	754	174	75	34	13	5.9
17	265	210	199	180	58	126	616	160	64	36	12	13
18	251	203	210	173	58	567	531	152	56	36	11	41
19	233	194	195	171	58	563	458	154	51	32	11	29
20	223	184	175	163	58	504	395	145	51	28	12	20
21	210	177	169	154	58	1140	346	174	51	25	12	15
22	198	171	168	147	62	2090	304	195	47	32	11	13
23	192	165	170	151	66	1450	271	163	41	43	11	11
24	237	162	184	133	73	1180	250	141	39	37	11	9.7
25	217	171	333	120	76	1060	234	125	36	28	9.7	8.8
26	195	614	364	110	74	850	223	111	32	23	9.2	8.8
27	189	1080	300	105	66	698	220	107	29	21	8.8	8.4
28	195	898	263	100	60	604	475	104	28	19	8.0	8.0
29	202	766	246	96	59	660	782	102	27	22	8.0	7.6
30	188	614	228	92	---	684	807	98	68	37	7.6	7.6
31	175	---	215	88	---	643	---	99	---	36	7.6	---
TOTAL	13690	10133	7904	4636	1913	14051	16721	7237	2179	1498	497.9	321.6
MEAN	442	338	255	150	66.0	453	557	233	72.6	48.3	16.1	10.7
MAX	1190	1080	506	290	83	2090	1120	671	138	153	38	41
MIN	175	162	168	83	58	58	220	98	27	19	7.6	5.9
CFSM	3.78	2.89	2.18	1.28	.56	3.87	4.76	1.99	.62	.41	.14	.09
IN.	4.35	3.22	2.51	1.47	.61	4.47	5.32	2.30	.69	.48	.16	.10

CAL YR 1979 TOTAL 129908.0 MEAN 356 MAX 2580 MIN 28 CFSM 3.04 IN 41.30
WTR YR 1980 TOTAL 80781.5 MEAN 221 MAX 2090 MIN 5.9 CFSM 1.89 IN 25.68

01439500 BUSH KILL AT SHOEMAKERS, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1976 to July 1978, June 1980 to July 1980.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	ACIDITY (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
JUN 26...	0730	34	50	7.2	22.5	13	7	3.0	3.2	1.1	2.1
JUL 23...	1030	46	39	7.5	24.5	13	4	2.0	3.5	1.1	2.2

DATE	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
JUN 26...	26	.3	.4	6	7.4	2.0	.1	2.0	28	22	.04
JUL 23...	26	.3	.5	9	7.0	2.1	.1	3.3	34	25	.05

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)	PHOS-PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS PO4)
JUN 26...	2.57	.09	.030	.04	.21	.24	.33	.030	.000	.00
JUL 23...	4.22	.05	.000	.00	.85	.85	.90	.030	.000	.00

01440200 DELAWARE RIVER BELOW TOCKS ISLAND DAMSITE, NEAR DELAWARE WATER GAP, PA

LOCATION.--Lat 41°00'42", long 75°05'09", Warren County, Hydrologic Unit 02040105, on left bank 40 ft (12 m) streamward from River Road, 1.0 mi (1.6 km) downstream from Tocks Island, 3.7 mi (6.0 km) northeast of Delaware Water Gap, PA, 4.0 mi (6.4 km) upstream from bridge on Interstate Highway 80, and at mile 216.1 (347.7 km).

DRAINAGE AREA.--3,850 mi² (9,970 km²) approximately.

PERIOD OF RECORD.--May 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 293.64 ft (89.501 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those from January 15 through June 18, which are fair. Diurnal fluctuation at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack, and by Pepacton, Cannonsville, Swinging Bridge, Toronto, Cliff Lake, and Neversink Reservoirs (see Delaware River Basin, reservoirs in) and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoirs (see Delaware River Basin, diversions).

AVERAGE DISCHARGE.--16 years, 6,590 ft³/s (186.6 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 103,000 ft³/s (2,920 m³/s) June 30, 1973, gage height, 23.82 ft (7.260 m); minimum daily, 580 ft³/s (16.4 m³/s) July 7, 8, 1965.

EXTREMES FOR [illegible]RRENT YEAR.--Maximum discharge, 75,200 ft³/s (2,130 m³/s) Mar. 22, gage height, 18.69 ft (5.697 m); minimum daily discharge, 1,430 ft³/s (40.5 m³/s) Aug. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3090	3490	11200	5330	1700	1600	21200	18900	2200	3960	2160	2100
2	8290	3380	9150	4090	2000	2000	20400	15900	2230	4030	1960	1950
3	10500	5010	8080	4810	2200	1800	18800	13900	2760	3240	2050	2030
4	10200	14300	8560	4540	1900	1850	17300	11100	2850	2800	2480	1680
5	10900	11700	8080	4270	2000	2240	19400	9210	2570	2130	2950	1900
6	16800	9080	7550	3530	2100	2070	17300	10200	2210	2380	3120	1780
7	17800	7780	6660	2500	2100	1870	14700	9030	2420	2200	2860	1830
8	13000	6840	6170	2800	2000	1850	12400	7880	2690	2910	2710	1930
9	11600	6210	4940	3000	2100	2710	12400	6900	2530	2770	2540	1700
10	10100	5500	4400	2900	2000	4040	25300	6400	2660	2560	1820	1620
11	10300	5240	4990	3450	1900	4550	30200	5280	2560	2560	1580	1620
12	9010	5220	5080	4250	1850	3440	22900	5120	3070	2440	1960	1710
13	8370	5070	5120	4110	1900	3130	18700	6400	2570	2000	1940	1850
14	7010	4800	5120	3610	2000	3450	16900	5650	2210	1990	1810	1830
15	6010	4290	5230	4000	1900	3840	19900	5520	1830	2230	2010	1810
16	6410	3950	4300	4000	1950	2390	22900	4970	2040	2360	1980	2000
17	6340	3830	3740	3460	1700	2050	19500	4250	2310	2420	1840	1890
18	6150	3740	4200	4020	1800	4230	16700	3660	2210	2380	1760	2420
19	5740	3500	4500	3890	1850	14500	14200	3460	1990	2050	1690	2170
20	5140	3380	4120	3060	2000	12900	11400	3890	2030	1490	1520	2300
21	3780	3380	4400	2710	2100	13200	10300	3720	1900	1610	1430	1830
22	3400	3410	4360	2710	2150	61100	10200	3780	1880	2280	1630	1840
23	4210	3090	3680	3130	2020	45500	8860	3550	2050	2570	1580	2160
24	4800	2990	3350	2800	2210	26100	8060	3210	2120	2310	1670	1830
25	5270	2940	3890	2500	1820	21900	7470	2840	1750	2250	1700	1850
26	5810	4270	7660	2600	1780	21000	6860	2480	1940	2050	1830	1960
27	5090	26300	8870	2500	1750	16700	5360	2230	2000	1740	2070	1900
28	3500	30000	7360	2600	1700	14100	5850	2210	1790	1710	2000	1950
29	3340	18300	6530	2300	1650	14800	15600	1870	1750	1580	2070	1800
30	3640	13600	5260	2100	---	20100	21600	1780	2700	1650	1950	2030
31	3680	---	4870	1750	---	21200	---	1960	---	1600	2010	---
TOTAL	229280	224590	181420	103320	56130	352210	472660	187250	67820	72250	62680	57270
MEAN	7396	7486	5852	3333	1936	11360	15760	6040	2261	2331	2022	1909
MAX	17800	30000	11200	5330	2210	61100	30200	18900	3070	4030	3120	2420
MIN	3090	2940	3350	1750	1650	1600	5360	1780	1750	1490	1430	1620

CAL YR 1979 TOTAL 3109180 MEAN 8518 MAX 58000 MIN 1530
WTR YR 1980 TOTAL 2066880 MEAN 5647 MAX 61100 MIN 1430

BRODHEAD CREEK BASIN

01440272 BUCK HILL CREEK AT BUCK HILL FALLS, PA

LOCATION.--Lat 41°11'31", long 75°17'13", Monroe County, Hydrologic Unit 02040104, on right bank 150 ft (46 m) upstream from pumping station at Buck Hill Falls, 0.1 mi (0.2 km) downstream from small tributary on right bank, and 0.9 mi (1.4 km) upstream from Griscom Creek.

DRAINAGE AREA.--5.76 mi^2 (14.92 km^2).

PERIOD OF RECORD.--January 1978 to December 1979 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 1,290 ft (393 m), from topographic map.

REMARKS.--Records good. Several observations of water temperature were made during this year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,980 ft^3/s (141 m^3/s) Jan. 9, 1978, gage height, 6.26 ft (1.908 m), from floodmarks; minimum daily discharge, 1.1 ft^3/s (0.031 m^3/s) Nov. 10, 11, 13, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 261 ft^3/s (7.39 m^3/s) Nov. 26, gage height, 3.88 ft (1.183 m); minimum, 9.2 ft^3/s (0.26 m^3/s) Dec. 23, gage height, 2.29 ft (0.698 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	11	19									
2	51	14	18									
3	49	30	17									
4	42	20	16									
5	44	17	15									
6	48	15	15									
7	33	14	14									
8	28	14	14									
9	24	13	13									
10	23	14	13									
11	21	14	13									
12	21	14	12									
13	19	13	13									
14	17	13	13									
15	16	12	12									
16	16	12	12									
17	15	12	15									
18	14	11	13									
19	14	11	11									
20	13	11	10									
21	13	10	10									
22	12	10	9.6									
23	12	9.8	9.8									
24	16	9.7	12									
25	13	11	38									
26	12	95	24									
27	12	69	18									
28	13	36	16									
29	12	26	15									
30	11	21	14									
31	11	---	13									
TOTAL	709	582.5	457.4									
MEAN	22.9	19.4	14.8									
MAX	64	95	38									
MIN	11	9.7	9.6									
CFSM	3.98	3.37	2.57									
IN.	4.58	3.76	2.95									

CAL YR 1979 TOTAL 6782.2 MEAN 18.6 MAX 141 MIN 2.1 CFSM 3.23 IN 43.79

01440400 BRODHEAD CREEK NEAR ANALOMINK, PA

LOCATION.--Lat 41°05'05", long 75°12'54", Monroe County, Hydrologic Unit 02040104, on left bank 1.5 mi (2.4 km) upstream from Paradise Creek, 1.6 mi (2.6 km) southeast of Henryville, and 2.3 mi (3.7 km) north of Analomink.

DRAINAGE AREA.--65.9 mi^2 (170.7 km^2).

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 586.50 ft (178.765 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 12, 1957, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--23 years, 139 ft^3/s (3.936 m^3/s), 28.54 in/yr (725 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,900 ft^3/s (365 m^3/s) July 28, 1969, gage height, 11.82 ft (3.603 m), from rating curve extended above 1,400 ft^3/s (40 m^3/s) on basis of slope-area measurement of peak flow; minimum, 5.4 ft^3/s (0.15 m^3/s) Sept. 11, 12, 13, 14, 1980, gage height, 1.14 ft (0.347 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,100 ft^3/s (31.2 m^3/s) and maximum (*):

		Discharge		Gage height				Discharge		Gage height	
Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)	Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)
Oct. 1	1530	1,310	37.1	4.91	1.497	Mar. 21	1530	*4,510	128	*7.82	2.383
Nov. 26	1900	1,610	45.6	5.30	1.615	Apr. 10	0330	1,200	34.0	4.76	1.451

Minimum discharge, 5.4 ft^3/s (0.15 m^3/s) Sept. 11, 12, 13, 14, gage height, 1.14 ft (0.347 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	498	79	225	133	52	37	420	353	55	25	16	11
2	621	85	197	125	50	36	409	316	55	23	15	7.6
3	531	280	172	115	47	35	359	307	75	26	20	7.2
4	492	222	159	104	46	34	392	250	67	25	17	6.9
5	451	182	148	100	44	34	350	216	52	23	15	7.6
6	527	162	139	94	43	35	292	194	46	53	14	10
7	380	149	134	88	42	36	251	177	47	32	14	7.6
8	313	136	125	85	41	58	230	161	49	26	12	6.9
9	265	126	115	84	40	71	600	147	46	23	11	6.1
10	246	138	107	87	40	58	985	135	48	21	11	6.1
11	224	138	102	96	41	73	669	130	43	21	11	5.8
12	212	140	99	216	41	59	469	149	39	56	12	5.4
13	200	128	113	137	40	52	368	153	37	36	11	5.4
14	180	130	121	116	39	60	366	136	34	27	10	5.4
15	165	120	102	114	38	67	725	116	32	24	10	7.2
16	155	119	95	108	37	61	520	104	32	23	9.6	5.8
17	145	112	111	101	37	91	390	95	30	23	8.8	8.8
18	130	108	109	97	36	550	328	94	29	21	8.0	23
19	120	102	88	95	35	371	279	97	28	18	9.2	13
20	110	98	91	91	35	304	242	89	29	17	9.2	9.6
21	101	94	85	86	39	1880	213	108	29	15	8.8	8.8
22	95	89	81	82	41	1400	187	104	26	20	8.8	7.6
23	92	84	82	81	45	800	169	85	25	21	8.8	7.2
24	131	85	99	79	49	644	154	75	24	18	7.6	6.1
25	109	100	347	75	48	571	144	70	23	15	7.2	6.9
26	94	531	296	72	46	412	137	63	23	14	6.9	7.6
27	87	756	231	68	42	342	142	62	22	14	6.1	6.9
28	95	470	191	65	39	303	494	54	21	14	5.8	6.9
29	98	333	172	62	38	408	552	51	22	19	5.8	6.9
30	88	271	161	60	---	411	447	49	29	28	11	6.9
31	82	---	145	55	---	399	---	51	---	17	9.2	---
TOTAL	7037	5567	4442	2971	1211	9692	11283	4191	1117	738	329.8	238.2
MEAN	227	186	143	95.8	41.8	313	376	135	37.2	23.8	10.6	7.94
MAX	621	756	347	216	52	1880	985	353	75	56	20	23
MIN	82	79	81	55	35	34	137	49	21	14	5.8	5.4
CFSM	3.45	2.82	2.17	1.45	.63	4.75	5.71	2.05	.56	.36	.16	.12
IN.	3.97	3.14	2.51	1.68	.68	5.47	6.37	2.37	.63	.42	.19	.13

CAL YR 1979 TOTAL 71584.0 MEAN 196 MAX 2140 MIN 12 CFSM 2.97 IN 40.41
WTR YR 1980 TOTAL 48817.0 MEAN 133 MAX 1880 MIN 5.4 CFSM 2.02 IN 27.56

BRODHEAD CREEK BASIN

01442500 BRODHEAD CREEK AT MINISINK HILLS, PA

LOCATION.--Lat 40°59'55", long 75°08'35", Monroe County, Hydrologic Unit 02040104, on left bank at Minisink Hills, 500 ft (150 m) upstream from Marshall Creek, 1,500 ft (460 m) downstream from Coates Paper Box Co., 0.8 mi (1.3 km) upstream from mouth, and 3 mi (4.8 km) southeast of East Stroudsburg.

DRAINAGE AREA.--259 mi^2 (671 km^2).

PERIOD OF RECORD.--November 1950 to current year.

REVISED RECORDS.--WSP 1232: 1951(P).

GAGE.--Water-stage recorder. Datum of gage is 301.84 ft (92.001 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 19, 1955, water-stage recorder, and Aug. 23 to Nov. 24, 1955, nonrecording gages at site about 1,300 ft (400 m) upstream at datum 2.19 ft (0.668 m) higher. Nov. 25, 1955, to July 24, 1956, nonrecording gage at site 40 ft (12 m) upstream at present datum.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--29 years, 568 ft^3/s (16.09 m^3/s), 29.79 in/yr (757 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 68,800 ft^3/s (1,950 m^3/s) Aug. 19, 1955, gage height, 29.9 ft (9.11 m), site and datum then in use, 27.0 ft (8.23 m), present site and datum, from floodmarks, from rating curve extended above 4,600 ft^3/s (130 m^3/s) on basis of computation of flow over dam at gage height 14.43 ft (4.398 m) and slope-area measurement of peak flow, site and datum then in use; minimum, 29 ft^3/s (0.82 m^3/s) Sept. 27, 1964; minimum gage height, 1.10 ft (0.335 m) Sept. 10, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,300 ft^3/s (122 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 26	2115	4,730	134	5.56	1.695	Mar. 21	1945	*11,000	312	*8.68	2.646

Minimum discharge, 40 ft^3/s (1.13 m^3/s) Sept. 10, gage height, 1.10 ft (0.335 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1570	367	841	564	218	170	1710	1390	340	121	100	49
2	1980	395	751	532	220	170	1630	1170	292	110	103	57
3	1920	1240	668	486	215	167	1430	1130	430	114	207	72
4	1880	927	625	442	210	167	1590	927	460	119	121	55
5	1590	775	590	424	210	170	1390	824	325	116	103	55
6	2010	698	564	395	205	167	1150	759	279	301	94	57
7	1440	660	558	389	205	164	1000	713	266	157	92	49
8	1200	604	512	373	197	204	909	646	253	129	84	49
9	1030	571	460	345	193	296	2220	577	249	116	84	45
10	1010	618	442	330	193	241	2850	558	270	110	78	43
11	945	618	424	378	211	325	2050	538	253	112	78	45
12	875	632	406	849	200	257	1590	632	234	237	92	45
13	849	558	493	532	173	211	1330	720	218	160	82	51
14	735	564	551	473	176	230	1380	597	211	129	74	49
15	653	512	442	460	176	275	2470	519	197	114	74	51
16	632	499	406	448	175	230	1810	473	180	110	74	53
17	551	473	448	424	170	287	1440	430	160	114	68	53
18	525	454	460	412	170	2550	1230	418	150	114	64	151
19	499	430	378	412	170	1600	1060	436	137	100	66	98
20	486	412	367	389	175	1280	936	412	135	96	66	78
21	460	400	351	373	186	4600	841	486	137	94	64	68
22	436	384	378	356	197	6620	759	493	129	94	62	66
23	412	373	373	351	200	3230	690	400	126	135	64	57
24	590	362	436	325	249	2250	639	373	119	112	59	53
25	493	384	1270	296	249	2170	597	345	116	94	57	51
26	430	1630	1060	287	218	1640	564	316	114	88	55	57
27	406	2530	866	257	179	1350	577	301	110	84	53	62
28	436	1600	759	257	170	1190	2100	287	107	80	45	62
29	467	1200	705	237	175	1480	2230	275	107	92	45	53
30	406	981	639	241	---	1480	1710	266	129	132	45	51
31	378	---	604	230	---	1490	---	287	---	98	51	---
TOTAL	27294	21851	17827	12267	5685	36661	41882	17698	6233	3782	2404	1785
MEAN	880	728	575	396	196	1183	1396	571	208	122	77.5	59.5
MAX	2010	2530	1270	849	249	6620	2850	1390	460	301	207	151
MIN	378	362	351	230	170	164	564	266	107	80	45	43
CFSM	3.40	2.81	2.22	1.53	.76	4.57	5.39	2.21	.80	.47	.30	.23
IN.	3.92	3.14	2.56	1.76	.82	5.27	6.02	2.54	.90	.54	.35	.26

CAL YR 1979 TOTAL 283198 MEAN 776 MAX 8000 MIN 88 CFSM 3.00 IN 40.68
WTR YR 1980 TOTAL 195369 MEAN 534 MAX 6620 MIN 43 CFSM 2.06 IN 28.06

01446500 DELAWARE RIVER AT BELVIDERE, NJ

LOCATION.--Lat 40°49'36", long 75°05'02", Warren County, Hydrologic Unit 02040105, on left bank at Belvidere, 800 ft (240 m) downstream from Pequest River, and at channel mile 197.7 (318.1 km).

DRAINAGE AREA.--4,535 mi² (11,746 km²).

PERIOD OF RECORD.--October 1922 to current year.

REVISED RECORDS.--WSP 781: 1933(M). WSP 951: 1940-41, Drainage area. WSP 1432: 1923, 1924(M).

GAGE.--Water-stage recorder. Datum of gage is 226.43 ft (69.016 m) National Geodetic Vertical Datum of 1929. Prior to Jan. 1, 1929, nonrecording gage at site 200 ft (61 m) upstream at same datum.

REMARKS.--Water-discharge records good. Diurnal fluctuations at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack, and by Pepacton, Cannonsville, Swinging Bridge, Toronto, Cliff Lake, and Neversink Reservoirs (see Delaware River Basin, reservoirs in) and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoirs (see Delaware River Basin, diversions).

AVERAGE DISCHARGE.--58 years, 7,960 ft³/s (225.4 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 273,000 ft³/s (7,730 m³/s) Aug. 19, 1955, gage height, 30.21 ft (9.208 m) from high-water mark in gage house, from rating curve extended above 170,000 ft³/s (4,810 m³/s) on basis of flood-routing study; minimum, 609 ft³/s (17.2 m³/s) Sept. 28, 29, 1943, gage height, 2.11 ft (0.643 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 10, 1903, reached a stage of 28.6 ft (8.72 m), from floodmark, discharge, 220,000 ft³/s (6,230 m³/s) from rating curve extended above 170,000 ft³/s (4,810 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 78,000 ft³/s (2,210 m³/s) Mar. 22, gage height, 15.76 ft (4.804 m); minimum, 1,540 ft³/s (43.6 m³/s) Sept. 28, gage height 2.94 ft (0.896 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4660	4530	13900	6930	2180	2120	24300	22600	3010	4060	2380	2250
2	11000	4350	11800	5960	2180	2730	23400	19300	2970	4510	2280	2220
3	13600	7120	10500	6070	2810	2320	21700	17100	3520	3590	2650	2130
4	13500	15100	10600	6070	2330	2360	20400	14300	3950	3170	2720	2070
5	14000	14500	10200	5410	2370	2940	22100	12300	3510	2770	3060	2000
6	19800	11800	9660	4480	2560	2570	20200	12300	2880	3200	3350	2120
7	20800	10500	9020	3450	2580	2490	17500	11700	2960	2780	3120	2020
8	16300	9300	8190	3860	2560	2470	15300	10300	3170	3080	2870	2150
9	14400	8450	6670	4210	2500	3110	15800	9290	3160	3160	2740	1920
10	13200	7820	5850	3950	2650	4530	27200	8450	3130	2890	2520	1880
11	13200	7550	6180	4280	2430	5650	33800	7080	3350	2840	1940	1880
12	11900	7560	6410	6700	2450	4490	26400	7070	3460	3030	2070	1860
13	11200	7270	6590	5330	2330	4030	21600	8860	3020	2580	2190	1990
14	9800	6910	6930	5140	2430	3060	19900	7960	2650	2480	2140	2120
15	8470	6280	6910	5490	2410	4130	22900	7290	2420	2270	2180	2020
16	8340	5760	5920	5330	2480	3110	26000	6570	2480	2610	2270	2000
17	8350	5440	5350	4790	2300	2850	22400	5650	2510	2680	2230	2120
18	8080	5370	5190	5110	2120	8220	19400	4930	2710	2750	2090	2520
19	7590	4930	5310	5250	2260	16500	17100	4650	2570	2450	1850	2470
20	6770	4700	5200	4470	2310	16400	14300	4970	2560	2150	2030	2480
21	5580	4660	4870	3850	2640	18200	13000	5000	2510	1920	1710	2320
22	4660	4690	5610	3610	2810	60000	12700	5190	2410	2130	1820	2070
23	5030	4360	5300	3980	2540	55600	11500	4650	2590	3060	1870	2080
24	6220	4090	4740	4010	3000	31900	10500	4180	2480	2660	1970	2200
25	6690	4130	6500	3210	2700	26100	9840	3750	2360	2560	1960	1980
26	7160	5890	10100	3450	2410	24900	9170	3270	2380	2360	1940	2020
27	6750	23700	11600	3130	2190	20100	7680	2980	2450	2250	2180	2060
28	4990	34600	9990	3280	2170	17100	9910	2840	2310	2060	2220	2000
29	4630	21500	8880	3010	2410	17600	18700	2670	2330	1920	2230	1940
30	4710	16400	7390	2670	---	21900	25000	2460	2870	2110	2210	1920
31	4800	---	6620	2140	---	23600	---	2590	---	1980	2200	---
TOTAL	296180	279260	237980	138620	71110	413080	559700	242250	84680	84060	70990	62810
MEAN	9554	9309	7677	4472	2452	13330	18660	7815	2823	2712	2290	2094
MAX	20800	34600	13900	6930	3000	60000	33800	22600	3950	4510	3350	2520
MIN	4630	4090	4740	2140	2120	2120	7680	2460	2310	1920	1710	1860

CAL YR 1979 TOTAL 3706170 MEAN 10150 MAX 68300 MIN 1950
WTR YR 1980 TOTAL 2540720 MEAN 6942 MAX 60000 MIN 1710

01447500 LEHIGH RIVER AT STODDARSTVILLE, PA

LOCATION.--Lat 41°07'49", long 75°37'33", Monroe County, Hydrologic Unit 02040106, on left bank 75 ft (23 m) upstream from bridge on State Highway 115, at Stoddartsville, 1.9 mi (3.1 km) upstream from Tobyhanna Creek, and 4 mi (6 km) southwest of Thornhurst.

DRAINAGE AREA.--91.7 mi^2 (237.5 km^2).

PERIOD OF RECORD.--October 1943 to current year.

REVISED RECORDS.--WSP 1382: 1947, 1951.

GAGE.--Water-stage recorder. Datum of gage is 1,463.81 ft (446.169 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1946, nonrecording gage at site 350 ft (110 m) downstream at datum 2.14 ft (0.652 m) lower.

REMARKS.--Records fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--37 years, 188 ft^3/s (5.324 m^3/s), 27.84 in/yr (707 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,900 ft^3/s (903 m^3/s) Aug. 19, 1955, gage height, 16.37 ft (4.990 m), from floodmarks, from rating curve extended above 1,700 ft^3/s (48 m^3/s) on basis of slope-area measurement of peak flow; minimum observed, 7.0 ft^3/s (0.20 m^3/s) Sept. 26, 27, 1964; minimum gage height, 0.19 ft (0.058 m) Sept. 27, 1980.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 22, 1942, reached a stage of 12.03 ft (3.667 m), from floodmark, present site and datum, discharge, 15,700 ft^3/s (445 m^3/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,330 ft^3/s (66.0 m^3/s) March 22, gage height, 5.10 ft (1.554 m); minimum, 12 ft^3/s (0.34 m^3/s) Sept. 27, gage height, 0.19 ft (0.058 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	339	135	284	173	67	58	483	279	102	65	33	16
2	820	153	247	165	65	56	496	246	93	53	32	16
3	680	492	214	158	64	55	429	227	135	55	61	16
4	972	403	196	137	64	54	483	195	178	50	45	16
5	636	303	185	128	63	54	483	178	123	52	41	17
6	559	254	177	121	62	55	399	167	98	106	61	21
7	438	227	171	121	60	56	343	165	89	70	43	17
8	403	205	161	115	58	66	306	154	106	58	38	16
9	344	187	151	109	57	130	528	144	100	52	32	15
10	344	205	141	107	56	84	879	139	110	50	28	14
11	295	211	137	121	56	102	650	135	96	47	27	14
12	269	205	135	237	58	90	492	181	85	119	29	14
13	258	185	149	187	57	72	416	190	78	83	27	14
14	223	179	161	149	55	82	434	180	71	65	25	14
15	202	166	150	185	54	92	546	170	67	55	25	14
16	187	163	140	168	53	90	501	147	62	49	24	14
17	171	153	145	151	52	150	408	135	58	53	23	14
18	161	146	140	141	54	530	347	130	55	52	21	26
19	153	139	130	137	56	407	306	135	50	45	22	24
20	146	132	122	128	60	344	268	125	58	41	23	19
21	141	128	120	119	64	846	243	127	55	40	22	18
22	135	124	119	115	70	1680	218	121	50	52	21	17
23	132	121	120	109	73	840	200	108	48	67	19	16
24	261	119	145	94	76	591	186	100	45	59	19	14
25	217	156	444	90	79	555	175	93	43	47	19	14
26	182	505	360	85	76	456	170	83	41	41	18	14
27	161	972	300	81	72	378	183	77	41	38	17	13
28	168	591	250	77	63	387	343	71	38	35	17	13
29	171	434	218	74	60	528	425	68	39	35	17	14
30	161	339	200	71	---	532	343	67	73	41	17	14
31	146	---	182	68	---	492	---	68	---	37	16	---
TOTAL	9475	7732	5794	3921	1804	9912	11683	4405	2287	1712	862	478
MEAN	306	258	187	126	62.2	320	389	142	76.2	55.2	27.8	15.9
MAX	972	972	444	237	79	1680	879	279	178	119	61	26
MIN	132	119	119	68	52	54	170	67	38	35	16	13
CFSM	3.34	2.81	2.04	1.37	.68	3.49	4.24	1.55	.83	.60	.30	.17
IN.	3.84	3.14	2.35	1.59	.73	4.02	4.74	1.79	.93	.69	.35	.19

CAL YR 1979 TOTAL 92452 MEAN 253 MAX 2080 MIN 30 CFSM 2.76 IN 37.50
WTR YR 1980 TOTAL 60065 MEAN 164 MAX 1680 MIN 13 CFSM 1.79 IN 24.37

01447680 TUNKHANNOCK CREEK NEAR LONG POND, PA

LOCATION.--Lat 41°03'55", long 75°31'14", Monroe County, Hydrologic Unit 02040106, on left bank 0.6 mi (1.0 km) downstream from unnamed tributary, 0.9 mi (1.4 km) downstream from bridge on Legislative Route 45040, 3 mi (5 km) west of Long Pond, and 5 mi (8 km) upstream from mouth.

DRAINAGE AREA.--18.0 mi^2 (46.6 km^2). At site used prior to July 7, 1966, 16.8 mi^2 (43.5 km^2).

PERIOD OF RECORD.--March 1965 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,804.83 ft (550.112 m) National Geodetic Vertical Datum of 1929. Prior to July 7, 1966, nonrecording gage at site 0.8 mi (1.3 km) upstream at different datum.

REMARKS.--Records good except those for winter periods, which are fair. Diversion above station, since October 1969, to Wild Creek Basin. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--15 years, 47.5 ft^3/s (1.345 m^3/s), 35.82 in/yr (910 mm/yr), adjusted for diversion since October 1969.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 480 ft^3/s (13.6 m^3/s) July 30, 1969, gage height, 4.34 ft (1.323 m); minimum, 3.0 ft^3/s (0.085 m^3/s) Mar. 11, 1969, gage height, 1.84 ft (0.561 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 170 ft^3/s (4.81 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 3	2130	185	5.24	3.02	0.920	Apr. 10	2030	220	6.23	3.18	0.969
Jan. 13	----	--	--	ice jam		Apr. 15	1700	182	5.15	3.01	0.917
Mar. 19	0230	217	6.15	3.17	0.966	Apr. 29	0630	182	5.15	3.01	0.917
Mar. 21	2030	436	12.3	4.12	1.256						

Minimum discharge, 3.9 ft^3/s (0.11 m^3/s) Sept. 15, 16, 17, gage height, 1.90 ft (0.579 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	42	55	35	16	12	108	114	30	19	9.4	5.9
2	136	44	48	31	16	11	116	84	30	18	9.4	5.9
3	163	76	43	29	15	11	108	68	47	17	11	6.0
4	165	91	49	27	15	9.4	108	59	78	17	13	5.8
5	175	91	46	25	14	9.9	108	58	54	18	14	6.1
6	157	76	44	24	14	11	98	54	38	31	12	5.9
7	133	59	46	24	14	12	84	53	30	38	11	5.7
8	108	53	44	23	14	17	76	51	28	25	10	5.6
9	98	48	41	22	14	28	142	48	30	18	9.1	5.3
10	89	50	40	22	14	30	214	47	34	16	8.6	5.2
11	84	53	39	27	13	20	211	47	33	15	8.6	4.8
12	80	56	38	80	13	20	175	59	28	25	11	4.6
13	78	55	44	60	12	17	122	91	26	36	14	4.3
14	74	48	49	47	12	9.8	119	80	23	27	14	4.2
15	70	45	44	36	12	10	166	58	22	20	12	4.1
16	63	39	38	35	11	11	172	48	21	16	11	3.9
17	58	37	38	32	11	20	154	44	21	15	9.9	4.4
18	53	36	44	27	11	169	114	43	20	15	9.3	5.7
19	50	34	33	23	11	204	91	48	19	14	8.8	8.7
20	47	32	30	22	11	182	80	45	20	12	8.3	9.7
21	45	31	31	29	11	242	74	47	20	11	7.9	8.5
22	44	30	32	28	12	381	68	55	21	11	7.6	7.5
23	45	30	33	25	13	300	66	46	19	14	7.4	6.7
24	53	31	39	28	15	217	63	38	18	18	7.1	5.9
25	57	35	87	27	16	142	59	33	17	17	6.8	5.5
26	58	80	98	23	15	108	58	31	16	14	6.5	5.1
27	53	157	65	21	13	89	59	30	15	12	6.3	4.7
28	51	151	52	20	12	80	122	29	17	11	6.0	4.5
29	49	119	53	19	12	101	182	28	17	10	5.9	4.4
30	47	78	40	18	---	125	163	28	18	9.8	5.7	4.4
31	45	---	36	17	---	116	---	28	---	9.4	5.8	---
TOTAL	2528	1807	1419	906	382	2715.1	3480	1592	810	549.2	287.4	169.0
MEAN	81.5	60.2	45.8	29.2	13.2	87.6	116	51.4	27.0	17.7	9.27	5.63
MAX	185	157	98	80	16	381	214	114	78	38	14	9.7
MIN	44	30	30	17	11	9.4	58	28	15	9.4	5.7	3.9
†	.48	3.36	1.58	.17	.31	.35	.48	.18	0	0	.19	.31
MEAN‡	82.0	63.6	47.4	29.4	13.5	87.9	116	51.5	27.0	17.7	9.46	5.95
CFSM‡	4.56	3.53	2.63	1.63	.75	4.89	6.47	2.86	1.50	.98	.53	.33
IN.‡	5.26	3.94	3.03	1.88	.81	5.63	7.22	3.30	1.67	1.14	.61	.37

CAL YR 1979 TOTAL 21957.0 MEAN 60.2 MAX 254 MIN 10 MEAN‡ 60.8 CFSM‡ 3.38 IN.‡ 45.90
WTR YR 1980 TOTAL 16644.7 MEAN 45.5 MAX 381 MIN 3.9 MEAN‡ 46.2 CFSM‡ 2.57 IN.‡ 34.87

† Diversion above station to Wild Creek basin equivalent in cubic feet per second, furnished by the City of Bethlehem.

‡ Adjusted for diversion.

01447720 TOBYHANNA CREEK NEAR BLAKESLEE, PA

LOCATION.--Lat 41°05'05", long 75°36'21", Carbon County, Hydrologic Unit 02040106, on left bank 50 ft (15 m) downstream from bridge on State Highway 940, 500 ft (150 m) downstream from Shingle Mill Run, and 1.5 mi (2.4 km) southwest of Blakeslee.

DRAINAGE AREA.--118 mi^2 (306 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,511.23 ft (460.623 m) National Geodetic Vertical Datum of 1929. Prior to Jan. 16, 1962, nonrecording gage at site 50 ft (15 m) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Occasional regulation by Pocono Lake about 5.0 mi (8.0 km) upstream and minor diversion from Tunkhannock Creek basin into Wild Creek basin.

AVERAGE DISCHARGE.--19 years, 264 ft^3/s (7.476 m^3/s), 30.37 in/yr (771 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,760 ft^3/s (191 m^3/s) July 29, 1969, gage height, 10.69 ft (3.258 m), from rating curve extended above 4,200 ft^3/s (120 m^3/s) on basis of slope-area measurement at gage height 19.41 ft (5.916 m); minimum, 22 ft^3/s (0.62 m^3/s) Sept. 24, 25, 1964, gage height, 1.51 ft (0.460 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 19, 1955, reached a stage of 19.41 ft (5.916 m), from floodmark, discharge, 35,300 ft^3/s (1,000 m^3/s), by slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,600 ft^3/s (45.3 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 27	0100	1,750	49.6	6.05	1.844	Apr. 10	0500	1,720	48.7	6.02	1.835
Mar. 21	2400	*5,100	144	*9.62	2.932						

Minimum discharge, 24 ft^3/s (0.68 m^3/s) Sept. 11, 12, 13, 14, 16, gage height, 1.70 ft (0.518 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	786	213	359	221	110	102	651	623	128	80	48	29
2	1240	241	313	209	105	94	678	466	148	78	54	29
3	1190	734	273	198	103	87	622	385	258	83	75	33
4	1270	683	266	182	100	80	625	333	322	83	69	30
5	935	495	252	180	100	79	633	294	239	99	62	34
6	809	387	246	166	99	84	527	264	176	198	70	39
7	656	323	249	165	97	87	446	256	151	163	69	36
8	552	282	244	162	96	128	396	242	156	118	57	30
9	477	259	224	157	95	203	940	230	160	97	54	29
10	459	281	212	152	94	183	1620	216	175	84	48	29
11	420	306	207	179	95	166	1200	211	157	75	48	26
12	394	318	205	380	93	141	866	278	138	189	62	24
13	380	297	254	330	93	127	663	393	123	184	57	24
14	344	281	292	274	92	153	632	370	110	132	52	24
15	308	257	254	239	91	146	950	293	102	100	52	28
16	284	248	229	221	91	129	966	242	100	84	49	25
17	268	227	255	203	91	147	761	213	93	86	43	30
18	253	215	226	188	92	766	584	205	89	80	41	66
19	241	204	212	181	93	822	473	213	86	70	41	62
20	229	195	202	173	95	664	408	204	93	63	42	56
21	221	189	191	167	97	2300	368	216	92	57	41	49
22	213	183	191	160	106	3510	333	226	89	63	37	43
23	219	181	190	159	113	1560	303	199	83	88	35	41
24	385	183	226	148	118	1010	287	173	78	88	33	37
25	358	212	713	141	118	810	273	158	75	75	32	36
26	303	837	728	138	113	623	262	140	70	63	30	34
27	260	1490	490	134	108	483	279	126	69	56	29	30
28	260	967	350	133	106	441	648	118	69	51	29	29
29	272	663	308	124	107	598	1040	114	66	51	29	30
30	253	459	263	120	---	686	850	112	78	49	29	29
31	232	---	238	115	---	660	---	116	---	46	29	---
TOTAL	14471	11810	8862	5699	2911	17069	19284	7629	3773	2833	1446	1041
MEAN	467	394	286	184	100	551	643	246	126	91.4	46.6	34.7
MAX	1270	1490	728	380	118	3510	1620	623	322	198	75	66
MIN	213	181	190	115	91	79	262	112	66	46	29	24
CFSM	3.96	3.34	2.42	1.56	.85	4.67	5.45	2.09	1.07	.78	.40	.29
IN.	4.56	3.72	2.79	1.80	.92	5.38	6.08	2.41	1.19	.89	.46	.33

CAL YR 1979 TOTAL 138933 MEAN 381 MAX 3220 MIN 50 CFSM 3.23 IN 43.80
WTR YR 1980 TOTAL 96828 MEAN 265 MAX 3510 MIN 24 CFSM 2.25 IN 30.53

01447720 TOBYHANNA CREEK NEAR BLAKESLEE, PA--Continued

WATER-QUALITY RECORDS

REMARKS.--Start of record June 27, 1980. Interruptions in the record were due to malfunction of the instruments.

PERIOD OF RECORD.--June to September 1980.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	ACIDITY (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
JUN 25...	1200	76	40	6.8	20.5	9	7	3.0	2.4	.8	2.6
JUL 23...	1300	90	36	6.9	23.5	10	3	4.0	2.8	.8	2.4

DATE	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
JUN 25...	37	.4	.4	2	4.4	5.2	.1	1.0	36	19	.05
JUL 23...	33	.3	.4	7	4.6	5.1	.1	1.6	36	22	.05

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)	PHOS-PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS PO4)
JUN 25...	7.39	.09	.020	.03	.76	.78	.87	.010	.000	.00
JUL 23...	8.75	.04	.030	.04	.22	.25	.29	.010	.000	.00

01447720 TOBYHANNA CREEK NEAR BLAKESLEE, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	---	---	---	22.5	16.5	19.0				---	---	---
2	---	---	---	20.5	17.5	19.0				---	---	---
3	---	---	---	20.0	18.0	19.0				24.0	20.5	22.5
4	---	---	---	24.5	17.5	21.0				21.5	16.5	19.5
5	---	---	---	22.0	18.0	20.0				21.5	18.0	19.5
6	---	---	---	22.5	18.5	20.0				23.0	18.0	20.5
7	---	---	---	23.0	16.5	19.5				21.0	17.0	19.0
8	---	---	---	23.0	17.5	20.0				20.0	15.0	17.5
9	---	---	---	24.5	18.0	21.0				19.5	14.0	17.0
10	---	---	---	24.0	19.0	21.5				19.5	16.0	17.5
11	---	---	---	24.0	19.5	21.5				17.5	13.0	15.5
12	---	---	---	24.5	20.0	21.5				18.5	14.5	16.0
13	---	---	---	24.5	18.5	21.5				20.0	15.0	17.0
14	---	---	---	25.0	17.5	21.5				19.5	17.0	18.0
15	---	---	---	24.5	19.0	22.0				17.5	14.5	16.5
16	---	---	---	26.5	21.0	23.0				14.5	12.0	13.5
17	---	---	---	25.5	20.0	23.0				16.0	13.5	14.5
18	---	---	---	26.0	20.5	22.5				17.5	15.5	16.0
19	---	---	---	24.5	20.0	22.0				17.0	12.5	15.0
20	---	---	---	26.5	22.0	23.5				16.0	13.0	15.0
21	---	---	---	24.5	21.0	22.5				20.5	16.0	18.0
22	---	---	---	24.0	19.5	21.5				21.5	17.5	19.5
23	---	---	---	24.5	18.5	21.0				20.0	16.0	18.5
24	---	---	---	24.5	20.5	21.5				16.0	13.5	15.0
25	---	---	---	---	---	---				14.0	13.5	14.0
26	---	---	---	---	---	---				15.5	12.5	14.0
27	24.0	20.0	22.5	---	---	---				13.0	10.0	11.5
28	22.0	18.0	20.0	---	---	---				13.5	9.0	11.0
29	22.0	18.5	20.0	---	---	---				14.0	11.0	12.5
30	21.0	18.5	20.0	---	---	---				15.5	12.5	13.5
31	---	---	---	---	---	---				---	---	---
MONTH	24.0	18.0	20.5	26.5	16.5	21.0				24.0	9.0	16.5

01447800 LEHIGH RIVER BELOW FRANCIS E. WALTER LAKE NEAR WHITE HAVEN, PA

LOCATION.--Lat 41°06'17", long 75°43'57", Luzerne County, Hydrologic Unit 02040106, on right bank 0.7 mi (1.1 km) downstream from Franics E. Walter Lake, 2.0 mi (3.2 km) upstream from Fawn Run, and 4 mi (6.4 km) northeast of White Haven.

DRAINAGE AREA.--290 mi^2 (751 km^2).

PERIOD OF RECORD.--October 1957 to current year. Prior to October 1962 published as "below Bear Creek Reservoir," October 1962 to September 1971 published as "below Franics E. Walter Reservoir."

GAGE.--Water-stage recorder. Datum of gage is 1,212.95 ft (369.707 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records good. Flow regulated by Francis E. Walter Lake (station 01447780) 0.7 mi (1.1 km) upstream since February 1961. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--23 years, 620 ft^3/s (17.56 m^3/s), 29.04 in/yr (738 mm/yr), adjusted for storage since February 1961.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,800 ft^3/s (391 m^3/s) Dec. 21, 1957, gage height, 9.85 ft (3.002 m), from rating curve extended above 6,100 ft^3/s (170 m^3/s); minimum, 1.3 ft^3/s (0.037 m^3/s) Nov. 14, 1961, result of shutoff at lake; minimum gage height, 1.86 ft (0.567 m) Sept. 16, 1964; minimum daily discharge, 22 ft^3/s (0.62 m^3/s) July 20-23, 1965.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 1955 reached a discharge of 54,200 ft^3/s (1,530 m^3/s) based on slope-area measurement at site 4.9 mi (7.9 km) downstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,060 ft^3/s (143 m^3/s) March 24, gage height, 7.02 ft (2.140 m); minimum, 10 ft^3/s (0.28 m^3/s) Sept. 18, gage height, 2.00 ft (0.610 m), result of upstream regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	472	510	817	641	198	180	1630	1070	229	188	102	70
2	816	490	833	528	197	157	1650	855	337	186	82	70
3	1180	1120	708	490	195	154	1710	724	522	185	165	70
4	2250	1830	599	421	198	183	1590	715	521	185	175	70
5	2920	1550	599	396	200	195	1490	688	447	160	122	70
6	2870	1100	590	399	202	170	1360	520	449	313	122	70
7	2760	868	572	395	203	229	1150	468	364	323	109	68
8	2600	739	578	390	201	268	951	553	321	235	97	68
9	2420	673	566	381	202	307	1560	519	394	204	97	66
10	1740	745	417	369	201	361	3420	485	347	185	97	66
11	1160	772	362	411	196	430	2740	474	347	163	114	65
12	900	698	450	666	198	371	1800	529	315	204	122	65
13	906	708	620	720	195	245	1590	742	266	252	122	65
14	821	692	609	633	192	283	1360	819	246	254	106	65
15	715	568	546	609	194	420	1690	661	246	254	97	65
16	543	546	540	463	191	376	2000	517	215	216	92	65
17	702	552	546	412	190	273	1300	466	186	186	92	65
18	508	535	546	459	185	1340	1090	465	147	185	92	59
19	583	470	526	499	180	1970	1260	466	123	185	92	63
20	697	434	426	474	177	1540	981	463	191	159	92	65
21	477	438	394	361	172	1270	771	460	251	122	81	66
22	478	433	410	303	234	843	732	460	178	164	75	66
23	478	424	415	323	254	3170	711	394	147	206	74	66
24	760	417	536	326	242	4750	558	368	117	145	74	66
25	943	434	1430	316	175	4660	549	368	119	125	74	66
26	745	1060	1800	311	150	3940	582	362	133	127	74	66
27	615	3060	1290	305	184	1610	570	292	143	126	74	66
28	586	2840	834	303	208	1330	1030	227	143	124	72	66
29	617	1810	730	292	205	1430	1840	227	142	125	72	66
30	598	1180	738	227	---	1670	1450	227	167	124	70	66
31	561	---	678	191	---	1660	---	227	---	124	70	---
TOTAL	34421	27696	20705	13014	5719	35785	41115	15811	7753	5734	2999	1990
MEAN	1110	923	668	420	197	1154	1371	510	258	185	96.7	66.3
MAX	2920	3060	1800	720	254	4750	3420	1070	522	323	175	70
MIN	472	417	362	191	150	154	549	227	117	122	70	59
MEAN≠	1102	922	673	416	198	1161	1363	509	261	180	93.0	61.1
CFSM≠	3.80	3.18	2.32	1.44	.68	4.00	4.70	1.76	.90	.62	.32	.21
IN.≠	4.38	3.55	2.68	1.66	.74	4.62	5.24	2.02	1.01	.72	.37	.24

CAL YR 1979 TOTAL 322365 MEAN 883 MAX 5270 MIN 121 MEAN≠ 884 CFSM≠ 3.05 IN.≠ 41.37
WTR YR 1980 TOTAL 212742 MEAN 581 MAX 4750 MIN 59 MEAN≠ 580 CFSM≠ 2.00 IN.≠ 27.21

≠ Adjusted for change in contents in Francis E. Walter Lake.

01448500 DILLDOWN CREEK NEAR LONG POND, PA

LOCATION.--Lat 41°02'08", long 75°32'37", Monroe County, Hydrologic Unit 02040106, on left bank 60 ft (18 m) upstream from bridge on Shucks Mill Road, 2.8 mi (4.5 km) upstream from Mud Run, 4 mi (6 km) northeast of Albrightsville, and 4.4 mi (7.1 km) west of Long Pond.

DRAINAGE AREA.--2.39 mi^2 (6.19 km^2).

PERIOD OF RECORD.--October 1948 to current year.

REVISED RECORDS.--WSP 1392: 1949(M), 1950-53.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,665.07 ft (507.513 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--32 years, 4.95 ft^3/s (0.140 m^3/s), 28.12 in/yr (714 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 630 ft^3/s (17.8 m^3/s) June 14, 1969, gage height, 3.995 ft (1.218 m), from rating curve extended above 300 ft^3/s (8.50 m^3/s) on basis of culvert and flow-over-dam computations of peak flow; minimum, 0.10 ft^3/s (0.003 m^3/s) Dec. 10, 1964, gage height, 0.55 ft (0.168 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft^3/s (1.42 m^3/s) and maximum (*):

		Discharge		Gage height				Discharge		Gage height	
Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)	Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)
Oct. 1	1345	99	2.80	2.49	0.759	Mar. 21	1630	*183	5.18	*2.86	0.872
Nov. 26	1645	92	2.61	2.45	0.747	Apr. 9	1030	55	1.56	2.22	0.677

Minimum discharge, 0.37 ft^3/s (0.010 m^3/s) Sept. 12, 13, 23, 24, 30, gage height, 0.81 ft (0.247 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	3.5	6.7	3.9	2.0	1.3	11	7.0	2.8	1.4	.82	.56
2	18	4.7	6.3	3.9	1.9	1.2	12	6.3	2.7	1.4	1.1	.62
3	22	20	5.6	3.6	1.8	1.1	9.9	5.9	6.3	1.5	1.6	.70
4	17	8.0	5.6	3.5	1.8	1.2	12	5.4	4.3	1.3	.97	.51
5	13	5.9	5.4	3.5	1.8	1.3	11	5.0	2.7	2.9	.78	.65
6	12	5.6	5.4	3.2	1.7	1.3	9.1	4.8	2.5	4.0	.87	.53
7	9.4	5.2	5.2	3.2	1.7	1.4	8.0	4.7	2.6	1.4	.74	.48
8	8.0	4.8	4.7	3.1	1.6	2.2	7.7	4.5	2.7	1.3	.74	.46
9	7.7	4.7	4.2	3.0	1.6	2.0	33	4.2	2.9	1.2	.74	.45
10	8.0	7.0	4.2	2.9	1.6	1.6	26	3.9	3.4	1.1	.70	.45
11	7.4	5.9	4.2	5.2	1.6	1.9	15	4.0	2.4	1.3	1.2	.44
12	8.2	6.1	4.0	11	1.6	1.4	12	9.4	2.2	2.2	2.4	.43
13	7.0	5.0	6.3	4.0	1.5	1.3	11	9.4	2.0	1.1	.82	.43
14	5.6	5.2	5.4	3.7	1.5	1.4	14	5.9	1.9	1.1	.78	.45
15	5.0	4.5	4.0	3.9	1.4	1.4	24	4.5	1.9	1.0	.87	.53
16	4.7	4.3	4.3	3.6	1.4	1.4	13	4.0	1.9	1.0	.78	.44
17	4.3	4.2	5.0	3.6	1.4	4.5	9.9	4.0	1.7	1.3	.70	1.1
18	4.3	4.0	3.6	3.6	1.3	20	8.8	4.5	1.7	.97	.70	1.3
19	4.3	3.7	3.4	3.5	1.4	6.3	8.0	4.3	1.6	.92	.74	.50
20	4.3	3.7	3.2	3.4	1.4	5.0	7.4	3.7	2.1	.92	.66	.48
21	4.3	3.6	3.2	3.2	1.4	68	7.0	5.9	1.7	.87	.66	.47
22	4.0	3.6	3.2	3.1	1.4	27	6.5	4.3	1.6	1.2	.66	.44
23	4.0	3.5	3.4	3.1	1.6	12	6.1	3.5	1.5	2.3	.66	.43
24	10	3.5	5.4	3.0	1.6	11	5.6	3.2	1.4	1.0	.59	.42
25	5.0	5.0	17	2.8	1.6	13	5.4	3.1	1.4	.87	.56	.45
26	4.2	41	7.0	2.6	1.5	9.1	5.0	2.8	1.4	.82	.52	.56
27	3.9	22	5.0	2.5	1.4	7.4	6.5	2.7	1.4	.82	.52	.42
28	5.4	11	4.7	2.4	1.4	7.0	21	2.6	1.4	.82	.52	.41
29	4.3	9.1	4.5	2.2	1.3	12	13	2.5	1.5	1.0	.52	.41
30	3.7	7.7	4.3	2.1	---	10	8.2	2.6	1.7	.87	.52	.41
31	3.6	---	4.2	2.0	---	10	---	3.0	---	.78	.52	---
TOTAL	256.6	226.0	158.6	108.3	45.2	245.7	347.1	141.6	67.3	40.66	24.96	15.93
MEAN	8.28	7.53	5.12	3.49	1.56	7.93	11.6	4.57	2.24	1.31	.81	.53
MAX	34	41	17	11	2.0	68	33	9.4	6.3	4.0	2.4	1.3
MIN	3.6	3.5	3.2	2.0	1.3	1.1	5.0	2.5	1.4	.78	.52	.41
CFSM	3.46	3.15	2.14	1.46	.65	3.32	4.85	1.91	.94	.55	.34	.22
IN.	3.99	3.52	2.47	1.68	.70	3.82	5.40	2.20	1.05	.63	.39	.25

CAL YR 1979 TOTAL 2411.02 MEAN 6.61 MAX 62 MIN .78 CFSM 2.77 IN 37.51
WTR YR 1980 TOTAL 1677.95 MEAN 4.58 MAX 68 MIN .41 CFSM 1.92 IN 26.11

LEHIGH RIVER BASIN

01449360 POHOPOCO CREEK AT KRESGEVILLE, PA

LOCATION.--Lat 40°53'51", long 75°30'10", Monroe County, Hydrologic Unit 02040106, on right bank 20 ft (6 m) downstream from bridge on U.S. Highway 209 at Kresgeville, 0.2 mi (0.3 km) downstream from Middle Creek, and 13 mi (21 km) northeast of Lehighton.

DRAINAGE AREA.--49.9 mi^2 (129.2 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 659.72 ft (201.083 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--14 years, 110 ft^3/s (3.115 m^3/s), 30.06 in/yr (764 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,080 ft^3/s (58.9 m^3/s) July 29, 1969, gage height, 9.21 ft (2.807 m), from rating curve extended above 800 ft^3/s (23 m^3/s); minimum, 13 ft^3/s (0.37 m^3/s) Sept. 12, 13, 14, 1980, gage height, 2.78 ft (0.847 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft^3/s (14.2 m^3/s) and maximum(*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 1	1415	777	22.0	6.52	1.987
Oct. 3	1330	500	14.2	5.59	1.704
Mar. 18	1515	508	14.4	5.62	1.713
Mar. 22	0215	*1,050	29.7	*7.23	2.204

Minimum discharge, 13 ft^3/s (0.37 m^3/s) Sept. 12, 13, 14, gage height, 2.78 ft (0.847 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	295	72	155	97	50	38	249	205	77	35	34	16
2	384	101	141	94	49	37	238	182	67	33	28	17
3	352	156	129	90	47	35	228	167	88	36	59	20
4	386	129	123	84	47	35	237	150	89	34	34	16
5	317	124	117	82	48	34	208	139	67	39	30	16
6	285	121	112	78	48	35	181	130	62	60	28	16
7	232	119	112	76	49	35	166	125	63	35	27	15
8	203	115	99	74	47	43	155	118	62	34	25	15
9	181	105	93	71	47	47	240	110	60	33	26	14
10	180	117	90	68	46	43	269	103	67	31	24	14
11	168	112	87	79	46	57	242	101	58	33	24	14
12	154	111	83	120	45	43	223	130	55	57	23	14
13	148	101	103	79	43	36	204	132	52	35	22	14
14	132	102	100	78	43	45	278	105	51	31	21	14
15	125	95	83	78	42	47	343	94	49	30	23	15
16	120	96	81	73	42	39	278	89	49	29	23	14
17	114	93	85	72	41	92	234	86	46	33	21	14
18	108	90	75	72	41	412	202	91	45	30	20	25
19	103	84	76	71	41	293	176	89	45	28	20	16
20	99	82	75	69	41	194	159	84	46	27	20	15
21	95	79	73	67	43	521	145	102	44	26	19	15
22	90	77	72	66	44	782	135	90	42	26	19	15
23	88	76	73	66	48	415	126	80	40	34	19	15
24	119	74	84	61	52	306	130	76	39	28	18	15
25	94	78	157	60	49	300	122	74	39	26	18	15
26	86	200	138	59	44	244	114	70	37	25	17	16
27	82	309	129	57	42	214	128	67	37	25	17	15
28	82	244	122	58	41	192	301	66	36	24	17	15
29	84	202	115	54	39	218	285	64	36	35	16	15
30	80	174	110	53	---	210	233	64	38	43	16	15
31	75	---	103	51	---	211	---	67	---	28	16	---
TOTAL	5061	3638	3195	2257	1305	5253	6229	3250	1586	1023	724	465
MEAN	163	121	103	72.8	45.0	169	208	105	52.9	33.0	23.4	15.5
MAX	386	309	157	120	52	782	343	205	89	60	59	25
MIN	75	72	72	51	39	34	114	64	36	24	16	14
CFSM	3.27	2.43	2.06	1.46	.90	3.39	4.17	2.10	1.06	.66	.47	.31
IN.	3.77	2.71	2.38	1.68	.97	3.92	4.64	2.42	1.18	.76	.54	.35

CAL YR 1979 TOTAL 49903 MEAN 137 MAX 1190 MIN 25 CFSM 2.75 IN 37.20
WTR YR 1980 TOTAL 33986 MEAN 92.9 MAX 782 MIN 14 CFSM 1.86 IN 25.34

01449360 POHOPOCO CREEK AT KRESGEVILLE, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1968 to September 1970, May 1971 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 31.5°C July 25, 1970; minimum, freezing point on several days during winter months.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 26.5°C July 21; minimum. 1.0 on many days during winter months.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	16.5	15.0	15.5	10.0	7.5	8.5	6.0	4.5	5.0	4.5	2.5	4.0
2	16.0	15.5	15.5	12.5	10.0	11.5	5.0	3.5	4.5	4.5	3.5	4.0
3	16.5	15.5	16.0	12.5	9.0	11.0	4.5	3.0	4.0	4.5	3.5	4.0
4	16.0	15.0	15.5	9.0	7.5	8.5	5.0	3.5	4.5	3.0	2.0	2.5
5	16.0	14.5	15.5	8.5	7.0	8.0	6.0	4.0	5.0	3.5	2.0	3.0
6	14.5	13.5	14.0	8.5	7.0	7.5	7.0	4.5	5.5	2.5	1.5	2.0
7	13.5	12.0	13.0	9.0	8.0	8.5	7.0	6.5	7.0	3.0	2.0	2.5
8	12.5	11.0	12.0	8.5	7.0	8.0	6.5	5.0	6.0	3.0	2.0	2.5
9	13.0	12.0	12.5	10.0	8.5	9.0	5.0	4.0	4.5	2.5	2.0	2.0
10	12.0	10.0	10.5	11.0	10.0	11.0	5.5	4.5	5.0	2.0	1.5	1.5
11	10.5	9.5	10.0	10.5	9.0	9.5	7.0	5.0	6.0	6.5	2.0	3.5
12	11.0	9.5	10.5	10.0	9.0	9.0	8.5	5.5	6.5	5.5	2.5	4.0
13	11.5	10.5	11.0	9.0	9.0	9.0	8.5	6.5	7.0	3.0	1.5	2.0
14	10.0	9.0	9.5	9.0	7.5	8.5	6.5	4.5	5.5	5.0	3.0	4.0
15	10.5	9.0	9.5	7.0	6.0	7.0	4.5	3.0	3.5	7.0	5.0	6.0
16	11.0	8.5	10.0	7.5	6.0	7.0	5.5	3.5	4.5	5.5	4.0	5.0
17	11.0	9.0	10.0	8.0	5.0	6.5	5.5	1.5	3.5	5.0	3.5	4.5
18	12.5	10.5	11.5	9.0	7.0	8.0	2.0	1.5	2.0	6.0	5.0	5.5
19	12.5	10.5	11.5	8.5	7.0	8.0	2.0	1.0	1.5	6.0	5.0	5.5
20	14.0	12.5	13.0	10.0	8.0	9.0	2.0	1.0	1.5	5.0	4.0	5.0
21	15.5	13.0	14.0	9.0	7.0	8.5	2.5	1.0	1.5	4.0	2.5	3.5
22	15.5	13.0	14.5	9.5	8.0	8.5	4.5	2.5	3.5	3.5	2.0	3.0
23	15.5	13.5	14.5	10.5	8.5	9.5	5.5	4.5	5.0	5.0	2.5	4.0
24	14.5	11.0	12.5	12.0	10.5	11.0	6.0	5.5	5.5	2.5	1.5	1.5
25	11.0	10.0	10.5	13.0	11.5	12.5	7.0	6.0	7.0	1.5	1.5	1.5
26	10.0	8.0	9.0	15.0	12.5	13.5	7.0	5.5	6.5	2.0	1.5	1.5
27	9.0	7.0	8.0	12.5	9.5	10.5	5.5	4.5	5.0	2.5	1.0	2.0
28	9.0	7.5	8.0	9.5	8.5	9.0	5.5	4.5	5.0	3.5	2.0	2.5
29	9.5	9.0	9.0	8.5	6.5	7.5	7.0	5.0	6.0	2.0	1.5	1.5
30	9.5	8.0	9.0	6.5	5.0	6.0	6.0	5.0	5.5	1.5	1.0	1.5
31	9.0	7.0	8.0	---	---	---	5.5	4.0	5.0	2.0	1.0	1.5
MONTH	16.5	7.0	11.5	15.0	5.0	9.0	8.5	1.0	5.0	7.0	1.0	3.0

01449360 POHOPOCO CREEK AT KRESGEVILLE, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.0	1.0	1.5	2.0	1.0	1.5				---	---	---
2	2.0	1.0	1.5	2.0	1.0	1.5				---	---	---
3	2.5	1.0	1.5	2.0	1.0	1.5				---	---	---
4	1.5	1.0	1.5	2.0	1.5	2.0				---	---	---
5	2.0	1.0	1.5	2.5	2.0	2.0				---	---	---
6	1.5	1.0	1.5	3.5	2.0	3.0				---	---	---
7	1.5	1.5	1.5	5.0	2.0	3.5				---	---	---
8	2.0	1.0	1.5	5.5	5.0	5.0				---	---	---
9	2.0	1.5	1.5	7.5	4.5	5.5				---	---	---
10	2.0	1.0	1.5	6.5	3.0	5.0				---	---	---
11	2.0	1.0	1.5	5.5	3.0	4.5				---	---	---
12	2.0	1.5	1.5	4.0	2.0	2.5				---	---	---
13	2.0	1.0	1.5	2.5	1.5	2.0				---	---	---
14	2.0	1.0	1.5	1.5	1.5	1.5				---	---	---
15	2.0	1.5	2.0	2.5	1.0	2.0				---	---	---
16	2.0	1.5	1.5	4.0	1.5	2.5				---	---	---
17	1.5	1.0	1.5	5.0	2.5	3.5				---	---	---
18	2.0	1.0	1.5	4.5	3.0	3.5				---	---	---
19	2.0	1.0	1.5	5.5	2.5	4.0				---	---	---
20	2.0	1.5	1.5	6.5	4.0	5.0				---	---	---
21	3.5	2.0	2.5	6.5	5.0	5.5				---	---	---
22	2.5	2.0	2.0	5.0	4.5	5.0				---	---	---
23	4.0	2.5	3.0	7.0	4.0	5.5				---	---	---
24	5.0	3.5	4.0	6.5	5.0	6.0				---	---	---
25	5.5	3.5	4.5	6.5	5.5	6.0				---	---	---
26	4.0	2.0	3.0	6.5	5.0	5.5				---	---	---
27	2.0	1.5	1.5	9.0	5.0	7.0				---	---	---
28	2.0	1.0	1.5	8.5	5.5	7.0				---	---	---
29	2.0	1.0	1.5	7.5	7.0	7.0				17.0	14.0	16.0
30	---	---	---	8.5	7.0	8.0				17.0	15.0	16.0
31	---	---	---	8.0	5.0	7.0				16.0	15.5	16.0
MONTH	5.5	1.0	2.0	9.0	1.0	4.0				17.0	14.0	16.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	19.5	15.5	17.5	21.5	18.0	19.5	23.0	20.5	22.0	24.5	21.5	23.5
2	19.0	17.0	18.0	20.0	18.5	19.5	23.5	21.0	22.0	25.0	22.5	23.5
3	19.0	16.0	17.5	19.0	18.5	19.0	23.5	20.5	22.0	24.0	22.0	23.0
4	18.0	16.0	17.0	22.5	18.0	20.0	24.0	21.5	23.0	22.0	19.5	21.0
5	17.5	14.0	16.0	21.0	19.0	20.0	24.5	21.5	23.0	21.0	20.0	20.5
6	16.5	13.5	15.5	21.5	19.0	20.5	24.0	22.5	23.0	22.5	19.5	21.0
7	19.5	15.5	17.5	20.5	17.0	19.0	24.0	21.0	22.5	21.0	19.0	20.5
8	19.5	17.0	18.0	20.5	18.0	19.0	24.5	21.5	23.0	20.0	17.5	18.5
9	16.5	13.0	14.0	23.0	19.0	21.0	25.0	22.5	24.0	19.5	16.5	18.0
10	14.5	12.5	13.5	23.5	20.5	22.0	24.0	21.5	22.5	20.5	18.5	19.5
11	14.0	11.0	13.0	23.5	20.5	21.5	23.0	21.0	22.0	18.0	15.5	17.0
12	16.0	11.5	14.0	22.0	19.0	20.5	23.0	21.0	22.0	19.0	16.5	17.5
13	17.0	12.5	15.0	22.0	18.0	20.0	23.0	20.0	21.5	20.0	16.5	18.5
14	18.5	14.0	16.5	22.5	18.0	20.5	21.0	19.0	20.0	20.5	19.0	19.5
15	20.0	17.0	18.5	22.5	19.5	21.0	21.0	20.0	20.5	20.0	17.5	19.0
16	19.5	17.0	18.0	24.0	21.0	22.5	20.0	18.0	19.0	17.0	15.0	16.0
17	18.5	14.5	16.5	24.0	21.0	22.5	20.5	16.5	18.5	16.5	16.0	16.0
18	17.0	14.5	16.0	24.0	21.5	23.0	19.0	18.0	18.5	---	---	---
19	18.5	14.5	16.5	24.0	21.0	23.0	21.0	18.0	19.5	17.5	14.5	16.5
20	17.5	15.5	16.5	25.5	21.5	23.5	22.5	18.5	20.5	17.0	14.5	16.0
21	19.0	14.0	16.5	26.5	23.0	24.5	21.0	19.5	20.5	20.5	17.0	18.5
22	19.0	16.0	17.5	25.5	23.0	24.5	20.5	19.0	20.0	22.5	19.0	20.5
23	20.0	16.5	18.0	24.0	22.0	23.0	21.5	19.0	20.5	21.5	19.5	21.0
24	21.0	17.5	19.0	23.5	21.0	22.0	21.5	18.5	20.5	19.0	16.0	17.0
25	23.0	19.0	21.0	23.5	19.5	21.5	22.0	19.0	21.0	16.5	15.0	15.5
26	23.0	19.5	21.0	24.0	20.0	22.0	22.5	19.5	21.0	16.5	15.0	15.5
27	22.5	19.5	21.0	24.5	21.0	22.5	23.5	20.0	21.5	15.0	12.5	13.5
28	21.5	19.5	20.5	23.5	21.0	22.5	24.0	21.0	22.5	14.0	11.0	12.5
29	20.5	19.0	20.0	23.0	21.5	22.0	24.0	21.5	23.0	14.0	12.5	13.5
30	21.0	19.5	20.0	23.5	21.0	22.0	24.5	22.0	23.5	16.0	14.0	15.0
31	---	---	---	23.5	20.0	21.5	24.5	22.5	23.5	---	---	---
MONTH	23.0	11.0	17.5	26.5	17.0	21.5	25.0	16.5	21.5	25.0	11.0	18.0

01449800 POHOPOCO CREEK BELOW BELTZVILLE DAM NEAR PARRYVILLE, PA

LOCATION.--Lat 40°50'44", long 75°38'46", Carbon County, Hydrologic Unit 02040106, on right bank 0.1 mi (0.2 km) upstream from Sawmill Run, 0.45 mi (0.72 km) downstream from Beltzville Dam, 1.3 mi (2.1 km) upstream from Bull Run, and 2.3 mi (3.7 km) northeast of Parryville.

DRAINAGE AREA.--96.4 mi^2 (249.7 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 492.05 ft (149.977 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records excellent. Flow regulated by Wild Creek Reservoir (station 01449700) and Penn Forest Reservoir (station 01449400), 7.3 mi (11.7 km) and 10.0 mi (16.1 km) upstream, respectively, and Beltzville Lake (station 01449790), 0.45 mi (0.72 km) upstream. Figures of daily discharge do not include diversion from Wild Creek Reservoir to city of Bethlehem. Diversion from Tunkhannock Creek to Wild Creek basin above station since October 1969.

AVERAGE DISCHARGE.--13 years, 221 ft^3/s (6.259 m^3/s), 31.12 in/yr (790 mm/yr), adjusted for storage and diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,740 ft^3/s (49.3 m^3/s) May 8, 1973, gage height, 5.59 ft (1.704 m); minimum, 0.90 ft^3/s (0.025 m^3/s) Oct. 11, 12, 1969, gage height, 2.12 ft (0.646 m), result of upstream shutoff.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,030 ft^3/s (29.2 m^3/s) March 26, gage height, 4.74 ft (1.445 m); minimum, 13 ft^3/s (0.37 m^3/s) April 2, gage height, 2.40 ft (0.732 m), result of upstream regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	167	468	125	67	67	282	651	130	52	52	215
2	271	167	367	154	67	67	367	518	128	52	52	215
3	399	167	242	171	67	61	476	439	130	52	52	138
4	394	167	176	171	67	56	476	439	132	52	52	130
5	392	165	175	171	67	56	476	213	132	53	52	219
6	529	159	175	171	67	56	476	99	130	53	52	219
7	644	159	175	171	67	56	285	99	128	52	52	219
8	641	159	175	156	67	56	212	99	128	52	52	219
9	638	159	175	135	67	56	271	185	128	52	52	219
10	638	159	142	135	67	56	542	241	128	52	52	219
11	634	159	125	135	67	56	496	241	128	52	52	219
12	465	159	125	135	67	56	53	242	128	52	52	257
13	262	230	125	135	67	56	52	241	128	52	51	256
14	167	269	125	135	67	56	52	197	128	52	50	215
15	167	202	125	135	67	56	54	156	128	52	50	175
16	167	163	125	111	67	56	229	156	128	52	50	119
17	167	163	125	99	67	56	849	156	128	52	50	108
18	167	163	125	99	67	56	671	156	128	52	50	108
19	167	119	125	99	67	324	377	156	103	52	50	76
20	167	96	125	99	67	476	377	156	86	52	50	48
21	167	96	125	99	67	306	377	156	86	52	50	48
22	167	96	125	99	67	229	372	156	86	52	50	48
23	167	96	125	99	67	372	372	156	86	52	50	48
24	167	96	125	99	67	546	172	156	86	52	50	74
25	167	96	126	99	67	673	53	156	65	52	148	102
26	167	97	125	80	67	809	54	135	54	52	297	102
27	167	96	125	67	67	1020	54	128	53	52	269	102
28	167	139	125	67	67	1000	315	128	52	52	141	102
29	167	478	125	67	67	547	655	128	52	52	131	149
30	167	626	125	67	---	282	655	128	52	52	215	211
31	167	---	125	67	---	282	---	129	---	52	215	---
TOTAL	9053	5267	4896	3652	1943	7901	10152	6396	3179	1614	2641	4579
MEAN	292	176	158	118	67.0	255	338	206	106	52.1	85.2	153
MAX	644	626	468	171	67	1020	849	651	132	53	297	257
MIN	140	96	125	67	67	56	52	99	52	52	50	48
†	+42.2	+37.8	+39.7	+41.0	+39.7	+39.8	+37.4	+42.0	+41.0	+42.7	+44.1	+42.1
MEAN‡	329	256	207	143	87.3	343	447	214	95.7	59.0	36.2	27.3
CFSM‡	3.42	2.66	2.14	1.49	.91	3.56	4.63	2.22	.99	.61	.38	.28
IN.‡	3.94	2.97	2.47	1.71	.98	4.11	5.17	2.56	1.11	.71	.43	.32

CAL YR 1979 TOTAL 84402 MEAN 231 MAX 1270 MIN 30 MEAN‡ 276 CFSM‡ 2.86 IN.‡ 38.83
WTR YR 1980 TOTAL 61273 MEAN 167 MAX 1020 MIN 48 MEAN‡ 187 CFSM‡ 1.94 IN.‡ 26.47

† Diversion above station from Wild Creek Reservoir for municipal supply, equivalent in cubic feet per second, furnished by City of Bethlehem.

‡ Adjusted for diversion from Wild Creek Reservoir and change in contnets in Penn Forest and Wild Creek Reservoirs, and Beltzville Lake.

01449800 POHOPOCO CREEK BELOW BELTZVILLE DAM NEAR PARRYVILLE, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1968 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 26.5°C on several days during July, August 1970; minimum, freezing point December 9, 1969.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 23.0°C September 19; minimum, 1.0°C February 1.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	16.5	16.0	16.0	12.5	12.0	12.0	9.0	8.5	9.0	5.0	4.5	4.5
2	16.0	16.0	16.0	12.5	12.0	12.0	8.5	8.5	8.5	4.5	4.5	4.5
3	16.0	15.5	15.5	12.0	12.0	12.0	8.5	8.0	8.0	4.5	4.0	4.5
4	16.0	15.5	15.5	12.0	11.5	12.0	8.0	7.5	8.0	4.0	4.0	4.0
5	16.0	14.5	15.5	12.0	9.5	11.5	8.0	7.5	7.5	4.0	3.5	4.0
6	15.5	13.0	14.0	11.5	11.5	11.5	7.5	7.5	7.5	3.5	3.5	3.5
7	13.5	12.5	13.0	11.5	11.0	11.5	7.5	7.5	7.5	4.0	3.5	3.5
8	13.0	12.5	12.5	11.0	11.0	11.0	7.5	7.0	7.0	3.5	3.5	3.5
9	13.0	12.5	13.0	11.0	11.0	11.0	7.0	7.0	7.0	3.5	3.5	3.5
10	13.0	12.5	12.5	11.0	11.0	11.0	7.0	7.0	7.0	3.5	3.0	3.5
11	12.5	12.5	12.5	11.0	11.0	11.0	7.0	7.0	7.0	3.5	3.0	3.0
12	14.5	12.5	14.0	11.0	11.0	11.0	7.0	7.0	7.0	3.5	3.0	3.5
13	14.5	14.0	14.5	11.0	11.0	11.0	7.0	7.0	7.0	3.5	3.0	3.0
14	14.0	14.0	14.0	11.0	10.5	10.5	7.0	6.5	7.0	3.5	2.5	3.0
15	14.0	13.5	14.0	10.5	10.5	10.5	6.5	6.5	6.5	3.5	3.0	3.0
16	14.0	13.5	13.5	10.5	10.0	10.0	6.5	6.5	6.5	3.0	2.5	3.0
17	13.5	13.0	13.5	10.0	10.0	10.0	6.5	6.0	6.0	3.5	2.5	3.0
18	13.5	13.0	13.5	10.0	9.5	10.0	6.0	6.0	6.0	3.5	3.0	3.5
19	14.0	13.5	13.5	10.0	9.5	10.0	6.0	5.0	5.5	3.5	3.0	3.0
20	14.0	13.5	13.5	10.0	9.5	10.0	5.0	5.0	5.0	3.5	2.5	3.0
21	14.0	13.5	13.5	10.0	9.5	9.5	5.0	5.0	5.0	3.0	2.5	2.5
22	14.0	13.5	13.5	10.0	9.5	9.5	5.0	5.0	5.0	2.5	2.5	2.5
23	14.0	13.0	14.0	10.0	9.5	10.0	5.0	5.0	5.0	3.0	2.5	2.5
24	13.0	12.5	13.0	10.0	9.5	10.0	5.5	5.0	5.0	2.5	2.0	2.5
25	13.0	12.5	12.5	10.5	10.0	10.0	5.5	5.0	5.5	2.5	2.0	2.0
26	12.5	12.5	12.5	10.5	9.5	10.0	5.5	5.0	5.0	2.5	2.0	2.0
27	13.0	12.5	12.5	9.5	9.5	9.5	5.0	5.0	5.0	2.5	2.0	2.0
28	12.5	12.5	12.5	10.0	9.5	9.5	5.0	5.0	5.0	2.5	2.0	2.0
29	12.5	12.0	12.5	9.5	9.0	9.0	5.0	5.0	5.0	2.0	2.0	2.0
30	12.5	12.0	12.5	9.0	9.0	9.0	5.0	4.5	5.0	2.0	2.0	2.0
31	12.5	12.0	12.0	---	---	---	5.0	4.5	4.5	2.0	1.5	1.5
MONTH	16.5	12.0	13.5	12.5	9.0	10.5	9.0	4.5	6.5	5.0	1.5	3.0

01449800 POHOPOCO CREEK BELOW BELTZVILLE DAM NEAR PARRYVILLE, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	1.5	1.0	1.5	3.0	2.0	2.5	5.0	4.5	4.5	8.5	8.0	8.0
2	2.0	1.5	1.5	3.5	2.0	2.5	6.5	4.5	4.5	8.5	8.0	8.5
3	2.0	1.5	2.0	4.0	2.5	3.0	5.0	4.5	4.5	8.5	8.5	8.5
4	2.0	1.5	1.5	4.0	2.5	3.0	5.0	4.5	4.5	9.0	8.5	8.5
5	2.0	1.5	1.5	3.0	2.5	3.0	5.0	5.0	5.0	10.5	8.5	9.5
6	2.0	1.5	1.5	4.0	2.5	3.0	5.0	5.0	5.0	11.0	9.0	9.5
7	2.0	1.5	1.5	4.5	3.0	3.5	6.0	5.0	5.5	11.0	9.0	10.0
8	2.0	1.5	2.0	3.5	3.5	3.5	6.5	5.5	6.0	10.5	9.5	10.0
9	2.0	1.5	2.0	4.5	3.0	3.5	5.5	5.5	5.5	10.0	9.0	9.0
10	2.0	1.5	2.0	4.5	3.0	3.5	5.5	5.5	5.5	9.0	9.0	9.0
11	2.0	2.0	2.0	4.5	3.0	3.5	6.5	5.5	6.0	9.0	9.0	9.0
12	2.5	2.0	2.0	4.5	3.0	3.5	8.5	6.5	7.0	9.5	9.0	9.0
13	2.5	2.0	2.0	3.5	2.0	3.0	9.0	6.5	7.5	9.5	9.0	9.0
14	2.5	2.0	2.0	4.0	2.5	3.5	8.5	7.0	8.0	10.0	9.0	9.5
15	2.5	2.0	2.0	5.0	3.0	3.5	9.0	7.5	8.0	10.5	9.5	9.5
16	2.5	2.0	2.0	4.5	3.0	3.5	8.5	7.0	7.5	10.0	9.5	9.5
17	2.5	2.0	2.0	4.0	3.5	3.5	7.0	7.0	7.0	---	---	---
18	2.5	2.0	2.0	5.0	3.5	4.0	7.0	7.0	7.0	---	---	---
19	2.5	2.0	2.0	5.0	3.5	4.0	7.0	7.0	7.0	---	---	---
20	3.0	2.0	2.5	4.0	4.0	4.0	7.0	7.0	7.0	---	---	---
21	3.0	2.0	2.5	5.0	4.0	4.0	8.0	7.0	7.5	---	---	---
22	2.5	2.0	2.5	4.0	4.0	4.0	7.5	7.0	7.5	---	---	---
23	3.5	2.5	2.5	4.0	4.0	4.0	8.0	7.5	7.5	---	---	---
24	3.0	2.5	2.5	4.0	4.0	4.0	11.0	7.5	9.0	---	---	---
25	3.5	2.5	2.5	4.0	4.0	4.0	10.5	9.5	10.0	---	---	---
26	3.0	2.0	2.5	4.0	4.0	4.0	10.5	9.0	9.5	---	---	---
27	2.5	2.0	2.5	4.0	4.0	4.0	10.5	9.0	10.0	---	---	---
28	3.0	2.0	2.5	4.0	4.0	4.0	10.5	7.5	9.0	---	---	---
29	3.0	2.0	2.5	4.5	4.0	4.0	7.5	7.5	7.5	12.0	11.0	11.5
30	---	---	---	4.5	4.5	4.5	8.0	7.5	8.0	12.5	11.0	11.5
31	---	---	---	5.0	4.5	4.5	---	---	---	12.0	11.0	11.5
MONTH	3.5	1.0	2.0	5.0	2.0	3.5	11.0	4.5	7.0	12.5	8.0	9.5

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	12.5	11.0	11.5	17.5	16.0	16.5	15.5	13.5	14.0	14.0	13.5	13.5
2	12.0	11.0	11.5	17.0	16.0	16.5	15.5	13.5	14.0	14.0	13.5	14.0
3	12.5	11.0	11.5	17.0	16.0	16.5	15.0	13.5	14.0	22.0	13.5	16.0
4	12.5	11.0	11.5	17.5	16.0	16.5	15.5	14.0	14.5	19.0	14.0	15.5
5	12.5	11.0	11.5	17.0	16.0	16.5	15.5	14.0	14.5	14.0	14.0	14.0
6	12.0	11.5	11.5	17.5	16.0	16.5	15.0	14.0	14.5	14.5	14.0	14.0
7	12.0	11.5	12.0	17.5	16.0	16.5	15.5	14.0	14.5	14.5	14.0	14.0
8	12.0	11.0	11.5	17.0	15.5	16.5	16.0	14.0	14.5	14.5	14.0	14.0
9	12.0	11.0	11.5	17.5	16.5	17.0	16.0	13.5	14.5	14.5	14.0	14.0
10	12.0	11.0	11.5	18.0	16.5	17.0	15.5	14.0	14.0	14.5	14.0	14.0
11	12.0	11.0	11.5	18.0	16.5	17.0	15.5	14.0	14.5	14.5	14.0	14.0
12	12.0	11.0	11.5	18.0	16.5	17.0	15.5	14.0	14.5	14.0	13.5	14.0
13	12.5	11.5	12.0	18.0	16.5	17.0	16.0	14.0	14.5	14.5	13.5	14.0
14	12.5	11.5	12.0	18.0	16.5	17.0	15.5	14.0	14.5	14.5	14.0	14.0
15	12.5	11.5	12.0	17.5	16.5	17.0	14.5	14.0	14.5	16.0	14.0	15.0
16	12.5	11.5	12.0	18.0	17.0	17.0	15.0	14.0	14.5	16.5	15.0	15.5
17	12.5	12.0	12.0	18.0	16.5	17.0	16.0	14.0	14.5	16.5	16.0	16.0
18	12.5	12.0	12.0	18.5	17.0	17.5	14.5	14.0	14.0	16.5	16.0	16.0
19	14.0	12.0	13.0	18.0	17.0	17.5	15.5	14.0	14.5	23.0	16.0	19.0
20	13.5	12.0	13.0	18.5	17.0	17.5	16.5	14.0	15.0	22.0	18.5	20.0
21	14.0	12.5	13.5	18.5	17.0	17.5	16.5	14.0	15.0	20.0	18.5	19.0
22	14.5	13.0	13.5	18.0	17.0	17.5	16.5	14.0	15.0	20.0	18.5	19.0
23	14.5	13.0	13.5	18.0	17.0	17.5	16.0	14.0	15.0	20.0	18.5	19.0
24	14.5	13.0	13.5	17.5	16.0	17.0	16.5	14.0	15.0	19.5	14.5	17.0
25	17.0	13.5	15.5	16.5	13.5	15.0	16.0	12.0	14.0	15.0	14.5	14.5
26	17.5	15.5	16.5	15.0	13.5	14.0	12.5	12.0	12.5	15.5	14.5	14.5
27	17.5	16.0	16.5	14.5	13.5	14.0	13.5	12.0	12.5	15.0	14.0	14.5
28	17.5	16.0	16.5	14.5	13.5	14.0	18.5	13.0	15.0	15.0	14.0	14.5
29	17.0	16.0	16.5	14.5	13.5	14.0	18.0	13.5	15.5	15.0	13.0	14.0
30	17.5	16.0	16.5	15.0	13.5	14.0	14.0	13.5	13.5	13.5	13.0	13.0
31	---	---	---	15.0	13.5	14.0	14.0	13.5	13.5	---	---	---
MONTH	17.5	11.0	13.0	18.5	13.5	16.5	18.5	12.0	14.5	23.0	13.0	15.5

01450500 AQUASHICOLA CREEK AT PALMERTON, PA

LOCATION.--Lat 40°48'22", long 75°35'54", Carbon County, Hydrologic Unit 02040106, on right bank 1,200 ft (370 m) upstream from Sixth Street Bridge in Palmerton, and 1.2 mi (1.9 km) upstream from mouth.

DRAINAGE AREA.--76.7 mi^2 (198.7 km^2).

PERIOD OF RECORD.--October 1939 to current year.

REVISED RECORDS.--WSP 1051: 1940-45 (monthly net diversion), drainage area. WDR PA-68: 1967 (monthly net diversion).

GAGE.--Water-stage recorder. Datum of gage is 389.08 ft (118.592 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Regulation at low flow by mills above station. Occasional diversion from Pohopoco Creek into Aquashicola Creek above station. Figures of daily discharge do not include water diverted above station from Aquashicola Creek by the New Jersey Zinc Co. Several observations of water temperture were made during the year.

AVERAGE DISCHARGE.--41 years, 154 ft^3/s (4.361 m^3/s), 27.23 in/yr (692 mm/yr), adjusted for diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,700 ft^3/s (331 m^3/s) July 10, 1945, gage height, 13.63 ft (4.154 m), from rating curve extended above 2,500 ft^3/s (71 m^3/s) on basis of contracted-opening measurement of peak flow; minimum, 2.6 ft^3/s (0.074 m^3/s) Sept. 12, 1957, from rating curve extended below 16 ft^3/s 0.45 m^3/s), minimum gage height, 2.44 ft (0.744 m) Sept. 16, 1964; minimum daily discharge, 9.1 ft^3/s (0.26 m^3/s) Sept. 15, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft^3/s (28.3 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 1	1830	1,180	33.4	5.86	1.786	Mar. 22	0030	*2,470	70.0	*7.72	2.353

Minimum discharge, 8.5 ft^3/s (0.24 m^3/s) March 1, gage height, 2.53 ft (0.771 m), result of freezeup.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	632	118	240	150	66	40	381	329	155	49	36	25
2	825	124	214	138	66	40	495	283	124	47	36	25
3	699	258	190	131	66	40	439	255	153	49	45	28
4	745	296	178	122	69	40	424	223	165	51	39	26
5	541	270	165	120	66	41	367	201	129	58	36	25
6	495	246	158	113	66	42	322	190	120	120	35	26
7	428	223	155	109	66	47	290	180	113	65	34	25
8	374	201	138	107	65	58	261	165	111	52	34	24
9	332	185	127	101	64	69	353	153	111	49	33	23
10	322	196	122	93	64	61	435	141	120	51	33	24
11	296	183	118	107	62	73	424	136	103	47	33	24
12	283	178	116	173	61	63	374	188	93	68	34	23
13	267	163	131	118	57	51	332	261	87	51	34	23
14	249	163	131	116	55	61	336	214	85	49	34	24
15	234	158	116	116	53	65	519	193	80	48	35	28
16	223	155	111	111	50	60	474	180	78	48	34	25
17	209	150	138	107	48	109	381	168	75	49	33	26
18	196	143	107	107	49	855	329	170	69	48	31	33
19	183	136	107	107	54	519	290	178	69	45	30	23
20	170	129	107	101	56	329	258	190	69	44	29	23
21	163	124	103	99	58	960	231	209	68	37	28	23
22	150	120	103	97	60	1610	209	209	65	37	28	23
23	138	118	105	97	64	704	190	196	60	55	28	22
24	185	116	118	91	68	486	173	185	58	47	28	21
25	145	116	243	89	73	447	163	170	55	40	27	21
26	129	326	299	87	68	367	153	155	52	37	26	21
27	122	679	270	82	60	322	160	141	51	36	26	20
28	133	443	240	85	50	286	356	131	51	37	26	20
29	133	336	210	78	45	309	490	124	49	44	26	21
30	124	277	185	71	---	286	395	120	55	60	26	20
31	122	---	160	71	---	293	---	122	---	36	25	---
TOTAL	9247	6330	4905	3294	1749	8733	10004	5760	2673	1554	982	715
MEAN	298	211	158	106	60.3	282	333	186	89.1	50.1	31.7	23.8
MAX	825	679	299	173	73	1610	519	329	165	120	45	33
MIN	122	116	103	71	45	40	153	120	49	36	25	20
ƒ	+0.6	+0.9	+0.5	+0.6	+1.9	+0.9	+0.4	+0.7	+0.9	+0.7	+0.4	+0.7
MEAN≠	299	212	159	107	62.2	283	334	186	90.0	50.8	32.1	24.5
CFSM≠	3.90	2.76	2.07	1.39	.81	3.68	4.35	.43	1.17	.66	.42	.32
IN.≠	4.49	3.08	2.39	1.61	.87	4.25	4.86	2.80	1.31	.76	.48	.36

CAL YR 1979 TOTAL 83659 MEAN 229 MAX 2000 MIN 40 MEAN≠ 230 CFSM≠ 2.99 IN.≠ 40.64
WTR YR 1980 TOTAL 55946 MEAN 153 MAX 1610 MIN 20 MEAN≠ 154 CFSM≠ 2.00 IN.≠ 27.27

ƒ Figures of net diversion, equivalent in cubic feet per second, include water diverted from Pohopoco Creek to Aquashicola Creek plus water diverted above station from Aquashicola Creek, furnished by New Jersey Zinc Company and Plamer Water Company.

≠ Adjusted for diversion.

01451000 LEHIGH RIVER AT WALNUTPORT, PA

LOCATION.--Lat 40°45'25", long 75°36'12", Northampton County, Hydrologic Unit 02040106, on left bank 0.3 mi (0.5 km) upstream from highway bridge at Walnutport, and 0.4 mi (0.6 km) upstream from Trout Creek.

DRAINAGE AREA.--889 mi^2 (2,303 km^2).

PERIOD OF RECORD.--October 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 350.27 ft (106.762 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Wild Creek Reservoir (station 01449700) since January 1941, Penn Forest Reservoir (station 01449400) since October 1958, Francis E. Walter Lake (station 01447780) since February 1961, and Beltzville Lake (station 01449790) since February 1971. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--34 years, 1,874 ft^3/s (53.07 m^3/s), 28.63 in/yr (727 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 77,800 ft^3/s (2,200 m^3/s) Aug. 19, 1955, gage height, 17.68 ft (5.389 m); minimum, 57 ft^3/s (1.61 m^3/s) July 27, 1965, gage height, 1.25 ft (0.381 m), result of upstream shutoff.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 20.6 ft (6.28 m) May 23, 1942, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 17,500 ft^3/s (496 m^3/s) March 22, gage height, 7.72 ft (2.353 m); minimum, 246 ft^3/s (6.97 m^{3}s) Sept. 24, gage height, 1.66 ft (0.506 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4920	1670	3280	2150	800	639	4440	3590	1260	522	331	448
2	5930	1680	2970	2050	900	719	4850	3130	1100	503	319	448
3	6430	3180	2690	1860	850	773	4720	2820	1400	503	400	466
4	6740	4010	2310	1770	950	779	4640	2580	1870	512	423	325
5	6970	3690	2230	1620	900	625	4220	2280	1370	531	393	460
6	7200	3170	2150	1570	900	624	3790	1980	1250	814	356	477
7	6450	2650	2050	1550	950	575	3280	1710	1230	814	350	458
8	5940	2470	1970	1480	900	735	2900	1660	1070	604	319	450
9	5440	2220	1860	1380	850	908	4030	1730	1130	551	307	448
10	5030	2320	1770	1370	850	853	7310	1680	1200	484	307	443
11	4050	2430	1490	1400	800	958	6840	1640	1100	457	313	437
12	3440	2260	1450	2140	850	944	4570	2010	1030	448	356	455
13	2970	2210	1730	1980	750	790	3860	2920	952	466	371	499
14	2740	2260	2100	1780	700	741	3860	2660	888	503	325	437
15	2410	2100	1710	1740	700	1120	4390	2320	863	493	325	447
16	2290	1910	1650	1670	750	934	4590	1980	850	493	325	348
17	2010	1880	1740	1390	650	1050	4720	1790	778	475	307	315
18	2210	1840	1620	1400	600	5130	3720	1770	731	448	295	398
19	1890	1730	1560	1460	600	5500	3240	1800	649	416	301	355
20	2000	1540	1540	1430	600	4400	3070	1750	604	400	295	265
21	1860	1510	1420	1370	650	7540	2680	1870	696	378	290	262
22	1700	1470	1390	1190	723	10600	2430	1840	672	343	286	259
23	1660	1450	1390	1180	870	7030	2340	1660	604	551	276	251
24	2280	1420	1510	1100	1000	7950	2060	1510	551	512	271	254
25	2350	1490	3500	1100	884	8970	1630	1460	493	385	295	294
26	2190	3430	5000	1100	720	7760	1640	1350	457	350	531	308
27	1850	7160	3870	1000	607	5650	1700	1260	457	337	531	299
28	1900	6490	3210	1040	833	4300	2860	1150	475	337	416	292
29	1940	5010	2540	1030	769	4220	4590	1060	475	356	290	309
30	1830	4350	2480	1000	---	4080	4320	1030	541	378	431	416
31	1740	---	2310	900	---	4080	---	1060	---	337	439	---
TOTAL	108360	81000	68490	45200	22906	100977	113290	59050	26746	14701	10774	11323
MEAN	3495	2700	2209	1458	790	3257	3776	1905	892	474	348	377
MAX	7200	7160	5000	2150	1000	10600	7310	3590	1870	814	531	499
MIN	1660	1420	1390	900	600	575	1630	1030	457	337	271	251
CFSM	3.93	3.04	2.49	1.64	.89	3.66	4.25	2.14	1.00	.53	.39	.42
IN.	4.53	3.39	2.87	1.89	.96	4.23	4.74	2.47	1.12	.62	.45	.47

CAL YR 1979 TOTAL 1029017 MEAN 2819 MAX 17900 MIN 367 CFSM 3.17 IN 43.06
WTR YR 1980 TOTAL 662817 MEAN 1811 MAX 10600 MIN 251 CFSM 2.04 IN 27.74

01451500 LITTLE LEHIGH CREEK NEAR ALLENTOWN, PA

LOCATION.--Lat 40°34'56", long 75°29'00", Lehigh County, Hydrologic Unit 02040106, on right bank at downstream side of bridge on Lehigh Parkway in Allentown, 0.8 mi (1.3 km) upstream from Cedar Creek, and 2.9 mi (4.7 km) upstream from mouth.

DRAINAGE AREA.--80.8 mi^2 (209.3 km^2).

PERIOD OF RECORD.--October 1945 to current year. Prior to October 1946, published as "at Allentown."

REVISED RECORDS.--WDR PA-73: 1946(M), 1951(P), 1955(M), 1956(M), 1958(M), 1962(M), 1963(M), 1965(M), 1969(M), 1971(M).

GAGE.--Water-stage recorder and, since September 1958, masonry control. Datum of gage is 253.41 ft (77.239 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records excellent. Occasional regulation at low flow by fish hatchery above station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--35 years, 98.9 ft^3/s (2.801 m^3/s), 16.62 in/yr (422 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,800 ft^3/s (334 m^3/s) June 22, 1972, gage height, 11.80 ft (3.597 m), from rating curve extended above 980 ft^3/s (27.8 m^3/s) on basis of slope-area measurement of peak flow; minimum, 17 ft^3/s (0.48 m^3/s) Feb. 4, 1965, result of upstream shutoff; minimum gage height, 1.39 ft (0.424 m) June 17, 18, 22, 1949.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft^3/s (12.7 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 26	1630	513	14.5	3.48	1.061	Mar. 21	1845	*950	26.9	*4.10	1.250

Minimum discharge, 40 ft^3/s (1.13 m^3/s) Sept. 23, 24, 25, 27, 28, 29, 30, gage height, 2.18 ft (0.664 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	173	91	109	107	77	70	191	178	128	76	63	44
2	153	93	106	106	81	70	177	159	145	73	68	43
3	150	179	105	105	81	71	152	149	162	72	65	44
4	122	127	105	101	81	69	190	141	133	72	63	44
5	134	108	105	101	79	70	167	135	103	75	59	45
6	143	103	106	99	78	70	144	131	98	89	56	44
7	114	101	121	99	78	68	137	132	98	73	55	44
8	109	100	106	98	77	70	131	137	106	70	55	43
9	106	98	101	96	77	104	163	128	101	69	54	43
10	141	111	100	93	77	84	203	124	121	67	53	43
11	143	112	100	116	76	92	161	122	103	66	53	43
12	126	117	100	165	77	79	145	144	96	64	55	42
13	122	107	119	111	75	77	142	172	93	62	54	42
14	111	108	124	105	75	79	149	137	90	62	53	42
15	106	101	106	103	76	79	191	122	87	62	56	59
16	103	99	105	99	78	78	171	117	86	61	59	45
17	101	98	112	96	76	127	146	112	85	81	53	45
18	100	96	99	97	74	264	139	115	83	69	51	90
19	97	95	99	111	75	155	134	117	83	65	51	51
20	96	94	97	99	75	119	131	110	84	62	50	46
21	95	95	95	95	77	350	128	145	82	61	49	44
22	93	93	98	93	85	355	125	132	80	65	49	43
23	95	93	98	94	100	189	123	113	79	81	49	42
24	137	93	110	88	100	156	121	107	77	70	48	41
25	105	93	237	89	87	204	121	104	77	64	47	41
26	98	266	159	87	82	155	119	99	75	60	47	43
27	95	193	129	85	77	139	141	97	75	59	46	41
28	103	132	120	86	75	130	273	95	73	58	46	41
29	102	120	115	84	72	160	263	95	75	65	45	40
30	94	114	112	80	---	150	204	95	85	64	45	40
31	93	---	109	82	---	149	---	103	---	59	45	---
TOTAL	3560	3430	3507	3070	2298	4032	4782	3867	2863	2096	1642	1358
MEAN	115	114	113	99.0	79.2	130	159	125	95.4	67.6	53.0	45.3
MAX	173	266	237	165	100	355	273	178	162	89	68	90
MIN	93	91	95	80	72	68	119	95	73	58	45	40
CFSM	1.42	1.41	1.40	1.23	.98	1.61	1.97	1.55	1.18	.84	.66	.56
IN.	1.64	1.58	1.61	1.41	1.06	1.86	2.20	1.78	1.32	.96	.76	.63

CAL YR 1979 TOTAL 57528 MEAN 158 MAX 3650 MIN 59 CFSM 1.96 IN 26.49
WTR YR 1980 TOTAL 36505 MEAN 99.7 MAX 355 MIN 40 CFSM 1.23 IN 16.81

01451800 JORDAN CREEK NEAR SCHNECKSVILLE, PA

LOCATION.--Lat 40°39'42", long 75°37'38", Lehigh County, Hydrologic Unit 02040106, on left bank 54 ft (16 m) downstream from wooden covered bridge at Trexler-Lehigh County Game Preserve, 1.0 mi (1.6 km) downstream from Mill Creek, and 1.1 mi (1.8 km) southwest of Schnecksville.

DRAINAGE AREA.--53.0 mi^2 (137.3 km^2).

PERIOD OF RECORD.--February 1966 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 400 ft (122 m), from topographic map. Prior to Oct. 2, 1973, nonrecording gage at bridge 54 ft (16.5 m) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--14 years, 96.0 ft^3/s (2.718 m^3/s), 24.60 in/yr (625 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,100 ft^3/s (201 m^3/s) June 22, 1972, gage height, 12.32 ft (3.755 m), from floodmark, from rating curve extended above 680 ft^3/s (19.3 m^3/s) on basis of contracted-opening measurement of peak flow; minimum observed, 0.4 ft^3/s (0.011 m^3/s) July 26, 1966; minimum gage height observed, 1.74 ft (0.530 m) July 19, 26, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft^3/s (17.0 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 1	1700	*1,550	43.9	*6.42	1.957
Mar. 18	0800	1,040	29.5	5.55	1.692
Mar. 21	1845	1,450	41.1	6.23	1.899

Minimum discharge, 1.0 ft^3/s (0.028 m^3/s) Aug. 29, gage height, 2.38 ft (0.725 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	581	36	111	90	24	29	353	255	44	16	4.7	1.6
2	630	37	95	81	24	27	435	192	37	14	4.7	1.6
3	545	109	81	74	24	25	334	158	40	14	6.5	2.8
4	435	67	74	67	25	29	320	119	44	14	6.0	2.8
5	384	61	69	67	26	31	229	99	28	13	4.7	2.8
6	316	59	67	61	27	31	190	88	26	23	4.7	3.7
7	235	59	71	63	28	31	158	81	27	13	5.1	3.2
8	178	55	57	48	28	33	129	74	36	12	3.9	2.0
9	150	51	51	43	27	48	213	63	29	12	3.5	1.4
10	175	76	50	40	26	37	178	57	41	10	3.2	2.3
11	150	67	46	61	25	51	147	55	27	9.8	5.1	2.3
12	144	74	44	144	26	37	137	107	24	9.2	6.6	2.2
13	137	67	83	71	24	26	129	278	22	8.1	5.3	1.9
14	109	71	83	61	24	37	178	158	21	7.5	3.8	2.3
15	95	67	67	65	25	50	261	124	20	7.5	4.2	16
16	83	67	67	59	26	44	238	99	20	7.5	5.6	7.2
17	67	63	69	53	27	129	195	85	18	11	4.5	4.6
18	63	61	67	53	26	825	161	83	17	9.8	3.6	6.8
19	57	57	61	53	26	423	129	74	17	8.1	4.0	5.1
20	51	55	71	50	26	271	109	65	19	6.5	4.1	4.2
21	50	53	65	44	31	725	95	111	17	6.0	3.3	4.0
22	46	51	65	44	36	825	81	74	15	6.5	2.8	3.7
23	44	48	63	44	109	439	69	57	14	12	2.9	3.2
24	67	46	83	36	114	306	61	50	13	10	2.9	2.7
25	46	48	275	33	67	353	57	44	13	7.0	2.3	2.7
26	41	198	282	30	46	271	51	38	12	6.0	2.0	4.5
27	38	245	229	29	37	229	83	35	12	5.1	1.6	3.8
28	50	207	181	28	37	181	342	33	11	4.7	1.4	3.3
29	48	172	150	27	31	235	388	32	12	5.6	1.1	2.9
30	38	137	124	26	---	192	327	30	38	5.6	1.3	3.0
31	37	---	104	25	---	226	---	31	---	5.1	1.9	---
TOTAL	5090	2464	3005	1670	1022	6196	5777	2849	714	299.6	117.3	110.6
MEAN	164	82.1	96.9	53.9	35.2	200	193	91.9	23.8	9.66	3.78	3.69
MAX	630	245	282	144	114	825	435	278	44	23	6.6	16
MIN	37	36	44	25	24	25	51	30	11	4.7	1.1	1.4
CFSM	3.09	1.55	1.83	1.02	.66	3.77	3.64	1.73	.45	.18	.07	.07
IN.	3.57	1.73	2.11	1.17	.72	4.35	4.05	2.00	.50	.21	.08	.08

CAL YR 1979 TOTAL 48568.0 MEAN 133 MAX 1560 MIN 18 CFSM 2.51 IN 34.09
WTR YR 1980 TOTAL 29314.5 MEAN 80.1 MAX 825 MIN 1.1 CFSM 1.51 IN 20.58

01452000 JORDAN CREEK AT ALLENTOWN, PA

LOCATION.--Lat 40°37'23", long 75°28'58", Lehigh County, Hydrologic Unit 02040106, on right bank 200 ft (60 m) upstream from bridge on State Highway 145, 0.5 mi (0.8 km) northwest of city limits of Allentown, and 2.5 mi (4.0 km) upstream from mouth.

DRAINAGE AREA.--75.8 mi^2 (196.3 km^2).

PERIOD OF RECORD.--October 1944 to current year.

REVISED RECORDS.--WDR PA-76-1: 1970(M), 1971.

GAGE.--Water-stage recorder and rubble masonry control, crest raised 1 ft (0.3 m) in August 1958 and further modified by filling in square notches on sides and notching center of dam at 17:1 slope in August 1974. Datum of gage is 259.82 ft (79.193 m) Pennsylvania Department of Transportation datum.

REMARKS.--Records good. Some regulation at low flow by mills above station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--36 years, 113 ft^3/s (3.200 m^3/s), 20.33 in/yr (516 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,200 ft^3/s (459 m^3/s) June 23, 1972, gage height, 11.61 ft (3.539 m), from floodmark, from rating curve extended above 6,100 ft^3/s (173 m^3/s) on basis of slope-area measurement of peak flow; no flow on many days.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 23, 1942, reached a stage of approximately 7.1 ft (2.16 m) outside, from floodmarks 650 ft (200 m) downstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,300 ft^3/s (36.8 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 1	2230	1,520	43.0	5.15	1.570	Mar. 21	2400	*1,590	45.0	*5.21	1.588

Minimum discharge, 2.4 ft^3/s (0.068 m^3/s) Aug. 31, gage height, 1.99 ft (0.607 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	476	57	150	116	24	26	422	313	60	26	7.9	6.7
2	791	57	131	104	24	25	599	231	55	17	7.9	6.8
3	612	125	109	94	24	24	474	197	51	15	7.5	6.4
4	523	115	104	78	26	27	429	158	68	15	7.5	6.4
5	412	101	97	77	27	31	321	133	45	19	7.6	7.2
6	427	96	91	59	27	35	254	117	37	26	7.5	6.4
7	296	93	98	65	27	34	215	107	37	21	7.2	6.4
8	232	85	82	68	28	40	184	99	50	15	7.2	6.5
9	190	82	73	50	29	56	247	86	43	13	7.1	6.5
10	205	88	72	44	27	47	250	78	57	12	7.3	6.7
11	206	107	65	66	25	57	206	73	43	11	7.3	6.6
12	189	104	60	147	27	42	190	95	35	10	7.4	7.0
13	187	100	100	70	24	35	178	289	32	9.0	7.0	7.4
14	158	104	110	91	22	26	195	176	30	8.4	6.8	9.4
15	142	104	90	82	26	56	330	141	29	8.4	6.9	9.4
16	130	102	90	75	26	50	315	120	27	8.3	6.8	7.0
17	118	94	95	68	24	67	251	104	25	8.5	6.7	8.5
18	107	90	90	66	24	848	207	99	23	8.1	6.5	9.9
19	98	82	85	67	23	540	173	96	22	8.1	6.5	7.7
20	89	79	100	63	24	330	149	85	23	8.1	6.5	7.5
21	83	75	90	57	26	638	133	114	23	8.0	7.0	7.4
22	79	72	90	53	35	1110	115	112	19	8.5	6.8	7.2
23	75	69	85	59	52	576	102	78	18	10	6.8	6.8
24	104	66	100	36	125	373	94	68	17	9.0	6.6	7.4
25	82	64	350	34	75	428	85	65	16	8.5	6.6	8.0
26	70	136	370	32	56	326	79	57	15	8.0	7.0	7.5
27	64	329	300	30	37	272	92	51	15	7.5	6.8	7.0
28	65	254	230	28	44	240	343	48	14	7.5	6.6	6.5
29	82	214	180	27	36	294	469	46	15	8.0	6.7	6.5
30	67	177	160	26	---	267	406	44	32	8.0	6.7	7.0
31	61	---	135	25	---	281	---	45	---	7.7	6.7	---
TOTAL	6420	3323	3982	1957	994	7201	7507	3525	976	357.6	217.4	217.7
MEAN	207	111	128	63.1	34.3	232	250	114	32.5	11.5	7.01	7.26
MAX	791	329	370	147	125	1110	599	313	68	26	7.9	9.9
MIN	61	57	60	25	22	24	79	44	14	7.5	6.5	6.4
CFSM	2.73	1.46	1.69	.83	.45	3.06	3.30	1.50	.43	.15	.09	.10
IN.	3.15	1.63	1.95	.96	.49	3.53	3.68	1.73	.48	.18	.11	.11

CAL YR 1979 TOTAL 61414.0 MEAN 168 MAX 2150 MIN 16 CFSM 2.22 IN 30.14
WTR YR 1980 TOTAL 36677.7 MEAN 100 MAX 1110 MIN 6.4 CFSM 1.32 IN 18.00

01452500 MONOCACY CREEK AT BETHLEHEM, PA

LOCATION.--Lat 40°38'28", long 75°22,47", Northampton County, Hydrologic Unit 02040106, on right bank 40 ft (12 m) downstream from highway bridge at entrance to Monocacy Park at Bethlehem, and 2.1 mi (3.4 km) upstream from mouth.

DRAINAGE AREA.--44.5 mi^2 (115.3 km^2).

PERIOD OF RECORD.--October 1948 to current year.

GAGE.--Water-stage recorder. Concrete control since July 17, 1969. Datum of gage is 247.24 ft (75.359 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to May 15, 1962, nonrecording gage at site 40 ft (12 m) upstream at same datum.

REMARKS.--Records good. Some regulation at low flow by mill above station since April 1954. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--32 years, 53.0 ft^3/s (1.501 m^3/s), 16.17 in/yr (411 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,490 ft^3/s (98.8 m^3/s) January 25, 1979, gage height, 8.19 ft (2.496 m); minimum, 3.0 ft^3/s (0.085 m^3/s) January 9, 1966, gage height, 1.67 ft (0.509 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 10, 1945, reached a stage of 9.74 ft (2.969 m), from floodmarks, discharge, 5,200 ft^3/s (147 m^3/s), by slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 360 ft^3/s (10.2 m^3/s) March 21, gage height, 3.62 ft (1.103 m); minimum, 21 ft^3/s (0.59 m^3/s) Sept. 6, 7, gage height, 2.21 ft (0.674 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87	53	73	75	38	34	143	99	65	37	33	23
2	95	51	72	72	38	34	155	91	61	37	36	23
3	130	81	66	68	38	33	140	85	68	43	36	24
4	114	68	63	65	38	33	150	79	68	40	32	22
5	123	66	63	65	38	36	118	73	56	43	32	23
6	110	66	61	59	40	36	105	72	53	45	29	23
7	91	66	66	58	40	34	95	70	53	38	29	22
8	83	65	59	56	38	36	89	68	53	38	29	22
9	79	63	54	56	38	40	112	66	54	38	29	21
10	87	68	54	53	38	37	125	65	59	37	30	23
11	83	63	53	58	40	38	112	63	53	37	32	22
12	81	66	51	75	38	34	105	77	51	41	30	22
13	81	63	61	50	37	34	97	105	48	34	29	22
14	73	65	68	50	38	34	101	83	48	32	28	23
15	72	63	59	51	38	37	118	75	46	32	27	26
16	70	61	59	51	38	37	105	70	45	30	27	22
17	68	61	65	51	38	46	99	66	46	30	27	23
18	68	61	58	49	36	184	93	65	43	28	24	24
19	65	59	58	51	37	130	87	66	43	28	25	23
20	63	59	56	49	36	99	83	75	45	29	25	22
21	59	56	54	49	34	181	77	79	43	29	24	23
22	56	51	56	46	37	241	73	72	41	33	24	23
23	54	51	56	48	51	160	70	70	40	36	24	22
24	70	51	61	45	56	125	66	63	43	30	23	21
25	59	51	107	45	45	143	65	61	38	29	22	22
26	54	95	103	43	40	120	63	59	36	29	22	22
27	54	97	99	43	38	107	68	58	34	33	22	21
28	58	91	93	43	37	93	123	58	33	33	23	21
29	58	85	87	41	36	103	114	54	34	34	23	22
30	54	79	81	38	---	95	107	54	45	33	24	22
31	53	---	77	40	---	103	---	56	---	34	23	---
TOTAL	2352	1975	2093	1643	1134	2497	3058	2197	1445	1070	843	674
MEAN	75.9	65.8	67.5	53.0	39.1	80.5	102	70.9	48.2	34.5	27.2	22.5
MAX	130	97	107	75	56	241	155	105	68	45	36	26
MIN	53	51	51	38	34	33	63	54	33	28	22	21
CFSM	1.71	1.48	1.52	1.19	.88	1.81	2.29	1.59	1.08	.78	.61	.51
IN.	1.97	1.65	1.75	1.37	.95	2.09	2.56	1.84	1.21	.89	.70	.56

CAL YR 1979 TOTAL 32668 MEAN 89.5 MAX 1160 MIN 35 CFSM 2.01 IN 27.31
WTR YR 1980 TOTAL 20981 MEAN 57.3 MAX 241 MIN 21 CFSM 1.29 IN 17.54

01453000 LEHIGH RIVER AT BETHLEHEM, PA

LOCATION.--Lat 40°36'55", long 75°22'45", Lehigh County, Hydrologic Unit 02040106, on left bank 110 ft (34 m) upstream from New Street Bridge at Bethlehem, and 1,800 ft (549 m) upstream from Monocacy Creek. Records include flow of Monocacy Creek.

DRAINAGE AREA.--1,279 mi^2 (3,313 km^2) includes that of Monocacy Creek. At site used prior to Oct. 1, 1928, 1,229 mi^2 (3,183 km^2).

PERIOD OF RECORD.--Sept. 1902 to February 1905, April 1909 to current year. Monthly discharge only for some periods, published in WSP 1302. Published as "at South Bethlehem" prior to Oct. 1913.

REVISED RECORDS.--WSP 261: 1903-5, WSP 321: 1910-11. WSP 1051: Drainage area. WSP 1141: 1929-34(M). WSP 1302: 1914(M), 1916(M), 1918, 1921, 1927-28. WSP 1432: 1903, 1919(M), 1920-21, 1929, 1933.

GAGE.--Water-stage recorder. Datum of gage is 210.94 ft (64.295 m) National Geodetic Vertical Datum of 1929. Prior to October 1928, nonrecording gage at New Street Bridge 120 ft (37 m) downstream at same datum. Oct. 1, 1928, to Sept. 30, 1962, water-stage recorder at site 4,250 ft (1,295 m) downstream at datum 2.49 ft (0.759 m) lower. Oct. 1, 1963, to Dec. 14, 1975, water-stage recorder at site 40 ft (12 m) downstream at same datum.

REMARKS.--Records good. Flow regulated by Wild Creek Reservoir (station 01449700) since January 1941, Penn Forest Reservoir (station 01449400) since October 1958, Francis E. Walter Reservoir (station 01447780) since February 1961, and Beltzville Lake (station 01449790) since February 1971. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--73 years (1902-04, 1909 to current year), 2,347 ft^3/s (66.47 m^3/s), 24.92 in/yr (633 mm/yr), adjusted for diversion 1902-04, 1909-42 and, for recirculated water, October 1, 1959 to September 30, 1962.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 92,000 ft^3/s (2,610 m^3/s) May 23, 1942, gage height, about 25.9 ft (7.89 m), from floodmark, present site and datum, from rating curve extended above 48,000 ft^3/s (1,360 m^3/s); minimum, 125 ft^3/s (3.54 m^3/s) June 28, 1965, gage height, 0.94 ft (0.287 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 28, 1902, reached a stage of 24.9 ft (7.59 m), from floodmark, present site and datum, discharge, about 88,000 ft^3/s (2,490 m^3/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 21,200 ft^3/s (600 m^3/s), March 22, gage height, 9.30 ft (2.835 m); minimum, 289 ft^3/s (8.18 m^3/s) Sept. 24, gage height, 1.09 ft (0.332 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5460	1870	4270	2920	1030	813	5890	4460	1880	840	574	643
2	8570	1870	3740	2780	1130	870	6510	3930	1710	813	547	629
3	7700	3640	3500	2590	1100	813	6030	3560	1880	784	615	699
4	8490	4350	3090	2420	1190	944	6150	3230	2480	798	657	519
5	8230	4200	2940	2300	1160	989	5230	3000	1930	856	699	615
6	8490	3600	2880	2170	1160	1020	4590	2630	1690	1190	547	657
7	7400	3110	2840	2140	1170	959	4120	2370	1660	1130	560	643
8	6780	2880	2650	2120	1140	1050	3620	2300	1660	1020	519	615
9	6180	2580	2500	1960	1130	1420	4410	2260	1540	841	454	615
10	6080	2770	2410	1860	1110	1340	8280	2240	1760	798	467	629
11	5010	2940	2160	2050	1080	1490	8310	2170	1560	727	480	587
12	4220	2780	2050	3050	1110	1410	5560	2500	1440	713	519	587
13	3740	2610	2370	2670	1020	1310	4500	4270	1340	685	587	671
14	3280	2670	2920	2540	1030	1130	4570	3480	1250	770	506	629
15	2940	2520	2480	2410	1050	1340	5600	3030	1200	770	493	827
16	2750	2260	2310	2330	1100	1490	5530	2670	1190	784	506	574
17	2410	2190	2460	2070	959	1610	5630	2440	1140	813	454	480
18	2580	2140	2210	2020	974	6530	4550	2370	1050	755	428	713
19	2260	2050	2210	2100	1020	7200	3810	2390	1020	671	415	574
20	2230	1870	2140	2050	1030	5720	3740	2440	944	657	441	403
21	2170	1800	2030	1980	1100	8650	3360	2560	944	657	428	344
22	1970	1750	2050	1630	1200	15900	3050	2590	1030	601	428	355
23	1930	1710	2030	1740	1310	9040	2900	2300	900	870	428	333
24	2630	1680	2170	1620	1760	9100	2730	2100	885	944	428	322
25	2670	1710	4200	1640	1470	10800	2280	2000	784	727	415	391
26	2460	3340	6030	1640	1280	9260	2210	1880	741	601	643	493
27	2120	8130	4970	1510	989	7270	2330	1760	727	574	798	428
28	2140	7650	4200	1590	1030	5010	3950	1640	713	587	727	403
29	2280	5930	3480	1410	989	5120	5910	1510	741	643	493	403
30	2070	5170	3300	1290	---	4810	5580	1470	1000	685	547	506
31	1950	---	3130	1230	---	4830	---	1490	---	601	643	---
TOTAL	129190	93770	91720	64030	32821	129238	140950	79040	38789	23905	16446	16287
MEAN	4167	3126	2959	2065	1132	4169	4698	2550	1293	771	531	543
MAX	8570	8130	6030	3050	1760	15900	8310	4460	2480	1190	798	827
MIN	1930	1680	2030	1230	959	813	2210	1470	713	574	415	322
CFSM	3.26	2.44	2.31	1.62	.89	3.26	3.67	1.99	1.01	.60	.42	.43
IN.	3.76	2.73	2.67	1.86	.95	3.76	4.10	2.30	1.13	.70	.48	.47

CAL YR 1979 TOTAL 1260328 MEAN 3453 MAX 32900 MIN 467 CFSM 2.70 IN 36.66
WTR YR 1980 TOTAL 856186 MEAN 2339 MAX 15900 MIN 322 CFSM 1.83 IN 24.90

01454700 LEHIGH RIVER AT GLENDON, PA

LOCATION.--Lat 40°40'09", long 75°14'12", Northampton County, Hydrologic Unit 02040106, on right bank 140 ft (43 m) upstream from highway bridge in Hugh Moore Parkway at Glendon, 1.9 mi (3.1 km) upstream from mouth, and 2.0 mi (3.2 km) southwest of Easton.

DRAINAGE AREA.--1,359 mi^2 (3,520 km^2).

PERIOD OF RECORD.--October 1966 to current year.

REVISED RECORDS.--WDR PA-72: 1971(M).

GAGE.--Water-stage recorder. Datum of gage is 164.30 ft (50.079 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Francis E. Walter Reservoir (station 01447780), Penn Forest Reservoir (station 01449400), and Wild Creek Reservoir (station 01449700) and since February 1971, Beltzville Lake (station 01449790) about 60 mi (97 km) upstream. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--14 years, 3,021 ft^3/s (85.55 m^3/s), 30.19 in/yr (767 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 60,600 ft^3/s (1,720 m^3/s) June 23, 1972, gage height, 24.86 ft (7.577 m), from rating curve extended above 36,000 ft^3/s (1,020 m^3/s); minimum, 488 ft^3/s (13.8 m^3/s) Sept. 25, 1980, gage height, 6.56 ft (1.999 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 21,700 ft^3/s (614.5 m^3/s) March 22, gage height 15.97 ft (4.868 m); minimum, 488 ft^3/s (13.8 m^3/s) Sept. 25, gage height, 6.56 ft (1.999 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4600	2260	4370	2830	1170	1130	6760	5310	2180	1100	752	770
2	8970	2230	3770	2780	1210	940	7230	4660	2080	1030	725	761
3	7630	3980	3530	2600	1210	1000	6860	4210	2220	1020	760	798
4	8780	4610	3090	2430	1270	1100	7010	3780	2910	1020	816	713
5	8380	4510	2930	2310	1340	1160	6270	3500	2290	1040	857	737
6	8690	3970	2860	2180	1300	1180	5520	3040	2000	1400	750	789
7	7590	3480	2850	2140	1300	1130	4970	2750	1950	1300	743	781
8	6980	3210	2630	2130	1300	1170	4320	2670	2010	1240	718	766
9	6370	2950	2490	1980	1280	1510	5190	2590	1830	1050	691	756
10	6370	3090	2410	1880	1250	1450	8380	2590	2110	1020	683	776
11	5450	3270	2180	2100	1230	1550	8610	2500	1880	947	701	746
12	4640	3170	2060	3110	1240	1490	6540	2880	1740	943	727	743
13	4170	2950	2400	2680	1190	1440	5410	5060	1640	889	768	786
14	3670	3020	2930	2540	1190	1280	5430	4090	1540	954	722	787
15	3370	2880	2490	2410	1200	1460	6410	3540	1480	945	711	985
16	3150	2630	2330	2350	1250	1550	6370	3110	1480	943	719	752
17	2850	2560	2500	2110	1160	1900	6400	2810	1420	984	680	660
18	2930	2500	2200	2040	1100	7560	5460	2710	1320	929	655	963
19	2710	2430	2230	2130	1120	7290	4530	2750	1300	868	650	758
20	2620	2230	2140	2070	1190	5730	4420	2820	1250	838	653	638
21	2620	2140	2060	2000	1240	10300	3970	2990	1220	834	640	562
22	2390	2090	2050	1850	1290	15300	3590	3050	1310	797	631	562
23	2320	2060	2070	1780	1370	9170	3380	2630	1200	986	618	548
24	3030	2020	2670	1700	1590	9310	3180	2400	1160	1090	599	512
25	3070	2030	5720	1670	1780	10700	2650	2300	1070	889	588	538
26	2870	3680	5850	1690	1570	9280	2550	2170	1020	791	707	629
27	2550	8380	4730	1590	1400	7520	2690	2040	998	753	868	580
28	2540	7890	4000	1630	1170	5880	4740	1930	979	748	824	571
29	2700	6150	3390	1490	1150	6090	6650	1790	1000	854	680	578
30	2500	5330	3250	1440	---	5720	6380	1750	1310	856	651	631
31	2360	---	2900	1330	---	5860	---	1770	---	792	761	---
TOTAL	138870	103700	93080	64970	37060	138150	161870	92190	47897	29850	22048	21176
MEAN	4480	3457	3003	2096	1278	4456	5396	2974	1597	963	711	706
MAX	8970	8380	5850	3110	1780	15300	8610	5310	2910	1400	868	985
MIN	2320	2020	2050	1330	1100	940	2550	1750	979	748	588	512
CFSM	3.30	2.54	2.21	1.54	.94	3.28	3.97	2.19	1.18	.71	.52	.52
IN.	3.80	2.84	2.55	1.78	1.01	3.78	4.43	2.52	1.31	.82	.60	.58

CAL YR 1979 TOTAL 1399323 MEAN 3834 MAX 32200 MIN 833 CFSM 2.82 IN 38.30
WTR YR 1980 TOTAL 950861 MEAN 2598 MAX 15300 MIN 512 CFSM 1.91 IN 26.03

01454720 LEHIGH RIVER AT EASTON, PA

LOCATION.--Lat 40°41'12", long 75°12'32", Northampton County, Hydrologic Unit 02040106, at Third Street Bridge, Easton, U.S. Highway 611.

DRAINAGE AREA.--1,360 mi² (3,530 km²).

PERIOD OF RECORD.--October 1961 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1963 to current year.
pH: October 1972 to September 1974, October 1975 to current year.
WATER TEMPERATURES: October 1961 to current year.
DISSOLVED OXYGEN: June 1966 to current year.

REMARKS.--Not operated October 1, 1979, through April 22, 1980.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 581 micromhos Aug. 19, 1963; minimum, 70 micromhos Nov. 14, 1970.
pH: Maximum, 8.4 Aug. 8, 1980; minimum, 6.0 Mar. 16, 1978.
WATER TEMPERATURES: Maximum, 30.5°C July 29, 1970, and July 21, 1980; minimum, freezing point on many days during winter months.
DISSOLVED OXYGEN: Maximum, 15.5 mg/L Jan. 11, 1978; minimum, 0.0 mg/L Aug. 4, 1966.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1							---	---	---	154	143	148
2							---	---	---	161	154	158
3							---	---	---	169	158	164
4							---	---	---	175	168	172
5							---	---	---	176	172	175
6							---	---	---	191	175	181
7							---	---	---	211	192	207
8							---	---	---	224	201	216
9							---	---	---	247	224	233
10							---	---	---	226	213	221
11							---	---	---	224	214	220
12							---	---	---	219	202	213
13							---	---	---	211	164	186
14							---	---	---	179	173	176
15							---	---	---	188	179	183
16							---	---	---	200	189	193
17							---	---	---	213	201	210
18							---	---	---	217	208	213
19							---	---	---	212	204	209
20							---	---	---	221	207	214
21							---	---	---	220	210	216
22							---	---	---	220	206	213
23							175	170	172	220	209	217
24							176	172	174	232	219	227
25							195	176	187	230	223	226
26							206	198	203	226	222	224
27							201	185	197	234	224	229
28							193	169	179	265	233	246
29							169	143	152	274	251	261
30							149	141	145	286	270	279
31							---	---	---	288	278	284
MONTH							206	141	176	288	143	210

01454720 LEHIGH RIVER AT EASTON, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	313	249	275	330	319	325	398	382	388	402	351	377
2	252	239	243	362	329	348	414	392	400	351	333	338
3	273	252	262	354	338	348	410	401	405	345	333	338
4	269	219	242	350	337	344	407	384	395	362	335	347
5	223	217	219	349	321	340	385	360	371	370	354	359
6	250	223	240	338	304	324	382	358	370	402	368	382
7	257	244	252	317	287	299	390	375	381	397	378	389
8	254	237	247	309	270	297	409	389	396	376	355	361
9	258	239	248	325	310	313	409	398	402	353	330	338
10	264	256	261	350	326	340	409	391	399	366	328	345
11	268	256	262	361	343	352	409	390	404	373	357	365
12	280	263	272	373	343	361	400	382	388	387	354	366
13	291	276	284	377	358	370	414	380	391	387	367	374
14	299	283	290	369	350	361	418	406	411	377	363	370
15	297	283	291	349	336	344	413	390	400	360	316	342
16	296	277	286	369	337	358	421	401	409	323	302	311
17	305	283	290	367	351	361	421	403	410	350	306	320
18	321	299	305	361	348	355	417	393	402	378	344	364
19	330	315	322	375	351	364	402	384	392	373	346	360
20	331	316	325	372	360	366	411	388	393	385	360	371
21	342	329	336	368	356	362	431	412	422	392	379	384
22	345	328	338	363	354	358	436	415	425	407	389	397
23	335	306	318	399	357	377	433	423	428	414	406	410
24	334	311	319	394	369	383	443	433	438	425	414	420
25	348	334	342	370	343	356	452	418	438	463	422	448
26	362	347	356	379	345	366	419	394	405	482	448	467
27	376	359	369	393	372	383	431	396	410	491	472	481
28	390	366	380	389	380	384	420	359	393	484	452	469
29	374	333	367	385	371	378	373	353	365	475	442	461
30	361	321	346	396	373	383	370	350	357	459	411	440
31	---	---	---	405	374	396	404	370	383	---	---	---
MONTH	390	217	296	405	270	355	452	350	399	491	302	383

PH (UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1							---	---	---	7.3	7.2	7.3
2							---	---	---	7.4	7.3	7.4
3							---	---	---	7.4	7.3	7.3
4							---	---	---	7.5	7.3	7.4
5							---	---	---	7.5	7.4	7.4
6							---	---	---	7.5	7.4	7.4
7							---	---	---	7.4	7.3	7.4
8							---	---	---	7.4	7.3	7.4
9							---	---	---	7.5	7.4	7.5
10							---	---	---	7.6	7.5	7.5
11							---	---	---	7.6	7.4	7.5
12							---	---	---	7.5	7.3	7.4
13							---	---	---	7.3	7.2	7.3
14							---	---	---	7.3	7.2	7.2
15							---	---	---	7.3	7.2	7.3
16							---	---	---	7.3	7.2	7.3
17							---	---	---	7.5	7.3	7.4
18							---	---	---	7.6	7.4	7.5
19							---	---	---	7.4	7.4	7.4
20							---	---	---	7.5	7.4	7.4
21							---	---	---	7.4	7.3	7.3
22							---	---	---	7.4	7.3	7.3
23							7.6	7.5	7.5	7.4	7.3	7.4
24							7.6	7.5	7.5	7.4	7.3	7.4
25							7.6	7.5	7.5	7.5	7.4	7.4
26							7.6	7.6	7.6	7.5	7.5	7.5
27							7.7	7.5	7.6	7.6	7.4	7.5
28							7.5	7.5	7.5	7.6	7.5	7.6
29							7.5	7.2	7.4	7.6	7.5	7.5
30							7.3	7.3	7.3	7.5	7.4	7.5
31							---	---	---	7.5	7.1	7.4
MONTH							7.7	7.2	7.5	7.6	7.1	7.4

01454720 LEHIGH RIVER AT EASTON, PA--Continued

PH (UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	7.4	7.0	7.4	7.6	7.3	7.4	7.9	7.4	7.6	8.0	7.4	7.6
2	7.4	7.2	7.3	7.6	7.3	7.4	7.8	7.4	7.6	7.9	7.3	7.6
3	7.3	7.2	7.2	7.4	7.3	7.3	7.9	7.3	7.6	8.0	7.3	7.6
4	7.3	7.2	7.2	7.5	7.2	7.3	8.0	7.4	7.6	7.9	7.3	7.5
5	7.2	7.2	7.2	7.5	7.2	7.3	8.1	7.4	7.7	7.8	7.3	7.5
6	7.2	7.2	7.2	7.3	7.2	7.2	8.2	7.4	7.7	7.6	7.3	7.4
7	7.2	7.2	7.2	7.6	7.2	7.3	8.3	7.4	7.8	7.7	7.3	7.4
8	7.2	7.1	7.2	7.6	7.3	7.4	8.4	7.5	7.9	7.7	7.3	7.5
9	7.4	7.0	7.2	7.7	7.4	7.5	8.3	7.4	7.8	7.8	7.3	7.5
10	7.4	7.4	7.4	7.7	7.4	7.5	8.0	7.4	7.7	7.7	7.3	7.5
11	7.5	7.4	7.4	7.8	7.4	7.5	8.1	7.4	7.7	7.8	7.3	7.5
12	7.5	7.4	7.4	7.7	7.4	7.5	8.0	7.4	7.7	7.8	7.3	7.5
13	7.5	7.4	7.5	8.0	7.4	7.6	8.1	7.4	7.7	7.8	7.3	7.5
14	7.5	7.4	7.4	8.2	7.4	7.8	8.0	7.5	7.7	7.6	7.3	7.4
15	7.5	7.3	7.4	8.1	7.5	7.8	7.9	7.4	7.5	7.5	7.3	7.3
16	7.5	7.2	7.4	7.8	7.4	7.6	7.7	7.4	7.5	7.4	7.2	7.3
17	7.6	7.4	7.5	7.6	7.3	7.4	7.9	7.4	7.6	7.5	7.0	7.3
18	7.5	7.4	7.4	7.6	7.3	7.4	7.9	7.5	7.7	7.5	7.3	7.3
19	7.5	7.3	7.4	7.7	7.3	7.4	7.8	7.4	7.6	7.4	7.1	7.3
20	7.4	7.3	7.3	8.0	7.3	7.5	8.0	7.4	7.6	7.5	7.2	7.3
21	7.4	7.2	7.3	7.9	7.3	7.6	8.0	7.4	7.7	7.5	7.2	7.3
22	7.4	7.2	7.3	8.1	7.3	7.6	7.9	7.4	7.6	7.5	7.2	7.3
23	7.8	7.2	7.4	8.0	7.4	7.6	7.7	7.4	7.5	7.7	7.2	7.4
24	7.8	7.4	7.6	7.8	7.4	7.6	7.8	7.4	7.5	7.7	7.2	7.4
25	8.0	7.3	7.6	8.0	7.4	7.7	7.9	7.4	7.6	7.7	7.2	7.4
26	8.1	7.3	7.6	7.8	7.4	7.6	8.1	7.5	7.7	7.6	7.3	7.4
27	8.0	7.4	7.7	8.0	7.3	7.6	8.0	7.5	7.7	7.6	7.3	7.4
28	7.9	7.3	7.6	8.1	7.4	7.7	8.2	7.4	7.7	7.7	7.3	7.5
29	7.8	7.4	7.6	7.9	7.4	7.6	7.9	7.3	7.5	7.8	7.4	7.5
30	7.7	7.3	7.4	7.6	7.4	7.5	8.0	7.3	7.6	7.7	7.3	7.5
31	---	---	---	7.9	7.3	7.5	7.9	7.3	7.6	---	---	---
MONTH	8.1	7.0	7.4	8.2	7.2	7.5	8.4	7.3	7.7	8.0	7.0	7.4

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1							---	---	---	13.0	12.5	12.5
2							---	---	---	14.5	13.5	14.5
3							---	---	---	15.5	14.5	15.5
4							---	---	---	16.5	15.0	16.0
5							---	---	---	17.5	16.0	16.5
6							---	---	---	18.0	16.5	17.0
7							---	---	---	18.5	17.0	18.0
8							---	---	---	18.5	17.0	17.5
9							---	---	---	17.0	16.0	16.5
10							---	---	---	16.0	15.0	15.5
11							---	---	---	16.0	15.0	15.5
12							---	---	---	15.5	15.0	15.5
13							---	---	---	17.0	15.5	16.0
14							---	---	---	17.5	17.0	17.5
15							---	---	---	17.5	17.0	17.5
16							---	---	---	17.5	16.5	17.0
17							---	---	---	17.5	17.0	17.0
18							---	---	---	17.5	17.0	17.0
19							---	---	---	17.5	16.5	17.0
20							---	---	---	18.0	17.5	17.5
21							---	---	---	18.5	17.5	18.0
22							---	---	---	18.5	17.5	18.0
23							15.0	14.5	15.0	20.0	18.5	19.5
24							15.5	14.5	15.0	21.0	20.0	20.5
25							15.5	15.0	15.5	21.5	20.5	21.0
26							15.5	15.0	15.0	21.0	20.0	20.5
27							15.0	13.5	14.0	20.0	19.5	19.5
28							13.5	12.5	13.0	20.0	19.0	19.5
29							12.5	12.0	12.0	20.5	19.5	19.5
30							12.5	12.0	12.0	20.0	19.5	20.0
31							---	---	---	20.0	19.5	19.5
MONTH							15.5	12.0	14.0	21.5	12.5	17.5

01454720 LEHIGH RIVER AT EASTON, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	21.0	19.5	20.5	25.0	23.0	24.0	28.5	27.0	28.0	28.0	27.0	27.5
2	21.5	21.0	21.0	25.0	23.5	24.0	28.5	27.5	28.0	28.5	27.0	28.0
3	22.0	21.0	21.5	24.5	23.5	24.0	29.0	27.5	28.0	29.0	27.5	28.5
4	21.5	20.5	21.0	25.0	23.5	24.0	29.0	27.5	28.5	28.5	27.0	27.5
5	21.0	20.0	20.5	25.0	23.5	24.5	29.5	28.0	28.5	28.0	26.5	27.0
6	20.5	20.0	20.5	25.0	23.5	24.0	29.5	28.0	29.0	27.0	26.0	26.5
7	21.5	20.0	20.5	24.5	23.0	23.5	29.5	28.0	29.0	27.0	25.5	26.0
8	22.0	21.0	21.5	25.0	23.0	24.0	29.5	28.5	29.0	26.0	25.0	25.5
9	21.0	19.0	20.0	26.5	24.0	25.0	29.5	28.5	29.0	25.5	24.5	25.0
10	19.0	18.0	18.5	27.0	25.0	26.0	29.5	28.5	29.0	25.5	24.5	25.0
11	18.0	17.0	17.5	27.5	26.0	26.5	28.5	27.5	28.0	25.0	24.0	24.5
12	19.0	17.5	18.0	27.5	26.0	27.0	28.0	27.0	27.5	25.0	23.5	24.0
13	20.0	18.5	19.0	27.5	26.0	26.5	27.5	26.5	27.0	25.0	23.5	24.5
14	21.0	19.5	20.5	28.0	25.5	26.5	27.0	26.0	26.5	25.0	24.0	24.5
15	22.5	20.5	21.5	27.5	26.0	27.0	27.0	26.0	26.5	24.5	23.5	24.0
16	22.5	21.5	22.0	28.0	26.5	27.5	26.5	25.5	25.5	23.5	22.5	23.0
17	22.5	21.5	22.0	28.0	27.0	27.5	25.5	24.5	25.0	23.0	22.0	22.5
18	22.5	21.0	21.5	28.5	26.5	27.5	25.5	24.0	24.5	23.5	22.5	23.0
19	22.0	20.5	21.5	29.0	27.0	28.0	25.0	24.0	24.5	23.5	22.0	22.5
20	22.0	20.5	21.0	29.5	27.5	28.5	26.0	24.0	25.0	23.5	22.0	23.0
21	21.5	19.5	20.5	30.5	28.5	29.5	25.5	25.0	25.0	24.5	23.0	23.5
22	22.5	20.0	21.5	30.0	29.0	29.5	25.5	24.5	25.0	25.5	23.5	24.5
23	23.5	21.0	22.5	30.0	28.5	29.0	26.0	24.5	25.0	26.0	25.0	25.5
24	24.5	21.5	23.0	28.5	27.0	28.0	26.5	25.0	25.5	25.5	24.0	24.5
25	25.5	23.0	24.0	28.5	26.5	27.5	27.0	25.5	26.0	25.0	23.0	23.5
26	26.0	24.0	25.0	28.5	27.0	27.5	27.5	26.0	26.5	23.0	22.5	23.0
27	26.0	24.5	25.5	28.5	27.5	28.0	28.0	26.5	27.0	22.5	20.5	21.0
28	26.0	24.5	25.5	28.5	27.5	28.0	28.0	26.5	27.5	21.5	20.0	20.5
29	25.5	24.5	25.0	28.5	27.0	27.5	28.0	26.5	27.0	21.5	19.5	20.0
30	24.5	23.5	24.0	28.0	27.0	27.5	28.0	26.5	27.5	21.5	20.0	20.5
31	---	---	---	28.0	26.5	27.5	28.0	27.0	27.5	---	---	---
MONTH	26.0	17.0	21.5	30.5	23.0	26.5	29.5	24.0	27.0	29.0	19.5	24.5

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1							---	---	---	12.0	11.2	11.6
2							---	---	---	12.4	11.2	11.8
3							---	---	---	11.6	11.0	11.3
4							---	---	---	11.6	10.6	11.0
5							---	---	---	11.0	10.1	10.5
6							---	---	---	10.2	9.2	9.7
7							---	---	---	9.5	8.7	9.1
8							---	---	---	10.9	8.1	9.5
9							---	---	---	11.8	10.4	11.1
10							---	---	---	12.5	11.2	11.8
11							---	---	---	12.0	11.3	11.6
12							---	---	---	11.8	10.9	11.2
13							---	---	---	11.1	9.9	10.5
14							---	---	---	9.9	9.6	9.8
15							---	---	---	9.8	8.9	9.2
16							---	---	---	9.4	8.7	9.1
17							---	---	---	9.9	8.8	9.3
18							---	---	---	9.3	8.9	9.1
19							---	---	---	9.7	8.9	9.2
20							---	---	---	9.6	8.7	9.1
21							---	---	---	9.1	8.2	8.5
22							---	---	---	9.1	8.3	8.7
23							11.4	9.4	10.2	9.0	8.3	8.6
24							11.9	8.7	10.4	8.6	7.7	8.2
25							10.9	9.4	10.1	9.1	7.7	8.5
26							10.7	9.0	9.9	9.5	8.1	8.7
27							10.3	9.9	10.2	10.1	8.5	9.2
28							10.2	10.0	10.1	10.5	9.2	9.8
29							11.8	9.2	10.6	10.7	9.2	9.8
30							11.9	11.2	11.6	10.1	9.1	9.5
31							---	---	---	10.8	9.0	9.8
MONTH							11.9	8.7	10.4	12.5	7.7	9.8

01454720 LEHIGH RIVER AT EASTON, PA--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	9.9	8.8	9.5	10.0	7.4	8.5	6.1	3.6	4.7	---	---	---
2	9.4	8.2	8.9	9.3	7.1	8.1	---	---	---	---	---	---
3	8.7	8.2	8.5	7.8	6.9	7.3	---	---	---	---	---	---
4	8.7	8.4	8.5	8.6	6.3	7.3	---	---	---	8.3	4.8	6.1
5	8.9	8.4	8.7	8.2	6.1	7.1	---	---	---	7.6	4.9	6.1
6	8.7	7.8	8.4	6.7	6.1	6.4	---	---	---	---	---	---
7	8.3	7.6	8.1	6.7	5.6	5.9	---	---	---	---	---	---
8	8.0	7.1	7.6	7.5	6.9	7.2	---	---	---	---	---	---
9	9.7	7.3	8.4	8.1	6.5	7.2	---	---	---	---	---	---
10	10.3	9.6	10.0	7.8	6.2	6.9	---	---	---	8.1	5.5	6.7
11	11.3	10.1	10.7	8.0	6.0	6.8	8.2	6.9	---	8.0	5.4	6.6
12	11.4	10.4	10.9	8.0	5.6	6.7	8.0	4.9	6.2	8.3	5.4	6.7
13	11.1	10.0	10.5	8.6	5.6	6.7	8.4	5.0	6.5	8.1	5.6	6.8
14	10.6	9.5	9.9	9.3	5.7	7.1	8.1	5.3	6.6	---	---	---
15	9.7	8.2	9.0	8.7	6.0	7.2	7.3	5.0	6.1	---	---	---
16	9.2	7.9	8.4	8.3	5.8	6.8	7.6	5.4	6.4	---	---	---
17	9.2	7.8	8.3	7.2	5.3	6.1	8.3	5.6	6.7	---	---	---
18	9.1	8.2	8.5	7.7	5.4	6.3	8.1	6.0	7.0	7.2	6.5	---
19	9.1	8.0	8.4	7.8	5.2	6.2	8.5	5.8	6.8	7.2	5.4	6.2
20	8.6	7.7	8.2	8.4	5.1	6.5	9.0	5.9	7.2	7.7	5.8	6.6
21	8.9	7.8	8.2	7.8	4.6	6.0	8.9	5.8	7.2	7.7	5.7	6.6
22	8.5	7.6	8.1	9.1	4.4	6.3	8.2	5.3	6.6	7.5	5.5	6.4
23	9.5	7.5	8.2	7.5	5.0	6.1	8.0	5.6	6.5	7.9	5.1	6.4
24	8.7	7.0	7.8	7.9	5.0	6.3	8.2	5.5	6.6	---	---	---
25	9.6	6.7	7.9	8.3	5.4	6.7	8.3	5.4	6.6	---	---	---
26	9.4	6.1	7.5	7.7	5.0	6.2	8.9	5.3	6.8	7.6	5.8	---
27	9.1	6.3	7.5	8.0	4.6	6.0	8.6	5.4	6.9	7.8	5.6	6.6
28	8.5	5.7	6.8	8.1	4.6	6.0	8.7	5.4	6.9	8.0	6.0	6.9
29	7.7	5.4	6.4	7.5	4.2	5.6	7.8	4.8	6.1	8.0	6.2	6.9
30	8.9	5.3	6.6	7.2	5.2	6.2	---	---	---	8.9	5.9	7.1
31	---	---	---	7.5	4.0	5.6	---	---	---	---	---	---
MONTH	11.4	5.3	8.5	10.0	4.0	6.6	9.0	3.6	6.6	8.9	4.8	6.6

LAKES AND RESERVOIRS IN LEHIGH RIVER BASIN

01447780 FRANCIS E. WALTER RESERVOIR (formerly published as Bear Creek Reservoir).--Lat 41°06'45", long 75°43'15", Luzerne County, Hydrologic Unit 02040106, at dam on Lehigh River, 2,200 ft (670 m) downstream from Bear Creek and 5 mi (8 km) northwest of White Haven. DRAINAGE AREA, 289 mi^2 (749 km^2). PERIOD OF RECORD, February 1961 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Reservoir formed by an earthfill embankment covered with a rock shell, with concrete spillway at elevation 1,450.0 ft (441.96 m). Storage began Feb. 17, 1961; water in reservoir first reached conservation pool elevation in June 1961. Total capacity at elevation 1,450.0 ft (441.96 m) is 110,700 acre-ft (136 hm^3) of which 108,700 acre-ft (134 hm^3) is controlled storage above elevation 1,300.0 ft (396.24 m), conservation pool. Dead storage is 2,000 acre-ft (2.47 hm^3). Reservoir is used for flood control and recreation. Flow regulated by three gates and low-flow by-pass system. Records furnished by the Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 42,600 acre-ft (52.5 hm^3) June 26, 1972, elevation, 1,398.20 ft (426.171 m); minimum (after establishment of conservation pool), 1,220 acre-ft (1.50 hm^3) Sept. 17, 1980, elevation, 1,291.33 ft (393.597 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 18,940 acre-ft (23.4 hm^3) March 23, elevation, 1,365.58 ft (416.229 m); minimum, 1,220 acre-ft (1.50 hm^3) Sept. 17, elevation, 1,291.33 ft (393.597 m).

01449400 PENN FOREST RESERVOIR.--Lat 40°55'45", long 75°33'45", Carbon County, Hydrologic Unit 02040106, at dam on Wild Creek, 0.7 mi (1.1 km) upstream from Hatchery, 2.6 mi (4.2 km) upstream from Wild Creek Dam, 4.4 mi (7.1 km) upstream from mouth, and 10 mi (16 km) northeast of Palmerton. DRAINAGE AREA, 16.5 mi^2 (42.7 km^2). PERIOD OF RECORD, October 1958 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by City of Bethlehem).

Reservoir formed by an earthfill dam, with ungated concrete spillway at elevation 1,000.00 ft (304.800 m). Storage began in October 1958. Capacity at elevation 1,000.00 ft (304.800 m) is 19,980 acre-ft (24.6 hm^3). Reservoir is used for municipal water supply. Figures given herein represent total contents. Regulation is done by valves on pipe through dam. Records furnished by city of Bethlehem. Figures given herein include diversion, since October 1969, from Tunkhannock Creek basin into Wild Creek basin.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 20,520 acre-ft (25.3 hm^3) Mar. 28, 1978, elevation, 1,000.92 ft (305.080 m); minimum, 176 acre-ft (0.217 hm^3) Oct. 6, 1965, elevation, 902.40 ft (275.052 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 20,420 acre-ft (25.2 hm^3) Apr. 29, elevation, 1,000.49 ft (304.949 m); minimum, 10,910 acre-ft (13.4 hm^3) Sept. 30, elevation, 976.75 ft (297.713 m).

01449700 WILD CREEK RESERVOIR.--Lat 40°53'50", long 75°33'50", Carbon County, Hydrologic Unit 02040106, at dam on Wild Creek, 1.6 mi (2.6 km) upstream from mouth, 2.4 mi (3.9 km) south of Hatchery, and 7.5 mi (12 km) northeast of Palmerton. DRAINAGE AREA, 22.2 mi^2 (57.5 km^2). PERIOD OF RECORD, January 1941 to current year. Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by city of Bethlehem).

Reservoir formed by earthfill dam, with concrete ungated spillway at elevation 820.00 ft (249.936 m). Storage began January 27, 1941; water in reservoir first reached minimum pool elevation in February 1941. Total capacity at elevation 820.00 ft (249.936 m) is 12,500 acre-ft (15.4 hm^3) of which 12,000 acre-ft (15 hm^3) is controlled storage. Reservoir is used for municipal water supply. Figures given herein represent usable contents. Regulation is accomplished by valves on pipe through dam. Records furnished by city of Bethlehem. Since October 1969 the basin upstream has received diversion from Tunkhannock Creek basin.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 12,880 acre-ft (15.9 hm^3) May 23, 1942, elevation, 822.93 ft (25.829 m); minimum (after first filling), 2,680 acre-ft (3.30 hm^3) Nov. 15, 1966, elevation, 774.10 ft (235.946 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 12,130 acre-ft (15.0 hm^3) Apr. 29, elevation, 820.44 ft (250.070 m); minimum, 8,610 acre-ft (10.6 hm^3) June 26, elevation, 806.92 ft (245.949 m).

01449790 BELTZVILLE LAKE.--Lat 40°50'56", long 75°38'19", Carbon County, Hydrologic Unit 02040106, at dam on Pohopoco Creek, 0.45 mi (0.72 km) upstream from gaging station on Pohopoco Creek, 0.55 mi (0.88 km) upstream from Sawmill Run and 2.3 mi (3.7 km) northeast of Parryville. DRAINAGE AREA, 96.3 mi^2 (249.4 km^2). PERIOD OF RECORD, February 1971 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Reservoir formed by an earth and rockfill dam with ungated, partially lined spillway at elevation 651.00 ft (198.425 m). Storage began Feb. 8, 1971. Capacity at elevation 651.00 ft (198.425 m) is 68,300 acre-ft (84.2 hm^3). Ordinary minimum (conservation) pool elevation is 628.00 ft (191.414 m), capacity, 41,250 acre-ft (50.9 hm^3). Dead storage is 1,390 acre-ft (1.71 hm^3). Reservoir is used for recreation, flood control, low-flow augmentation and water supply. Figures given herein represent total contents. Regulation is accomplished by a multi-level water-quality outlet system. and two flood-control gates. Records furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 49,730 acre-ft (61.3 hm^3) Jan. 29, 1976, elevation, 636.30 ft (193.444 m); minimum (after first filling), 28,800 acre-ft (35.5 hm^3) Sept. 30, 1980, elevation, 612.86 ft (186.800 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 45,640 acre-ft (56.3 hm^3) Mar. 24, elevation, 632.44 ft (192.768 m); minimum, 28,800 acre-ft (35.5 hm^3) Sept. 30, elevation, 612.86 ft (186.800 m).

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in cfs)	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in cfs)
	01447780 Francis E. Walter Reservoir			01449400 Penn Forest Reservoir		
Sept. 30	1304.96	2510	--	983.09	13050	--
Oct. 31	1299.70	1970	- 8.8	982.53	12850	- 3.2
Nov. 30	1298.82	1870	- 1.7	988.17	14940	+ 35.1
Dec. 31	1302.11	2210	+ 5.5	990.15	15700	+ 12.4
CAL YR 1979	--	--	+ .3	--	--	+ .8
Jan. 31	1300.00	2000	- 3.4	990.46	15830	+ 2.1
Feb. 29	1300.60	2060	+ 1.0	987.52	14690	- 19.8
Mar. 31	1304.80	2490	+ 7.0	992.59	16720	+ 33.0
Apr. 30	1300.20	2020	- 7.9	1000.41	20220	+ 58.8
May 31	1299.73	1970		1000.15	20070	- 2.4
June 30	1301.47	2150	+ 3.0	999.02	19540	- 8.9
July 31	1298.74	1860	- 4.7	990.59	15890	- 59.4
Aug. 31	1296.41	1630	- 3.7	983.05	13030	- 46.5
Sept. 30	1292.83	1320	- 5.2	976.75	10910	- 35.6
WTR YR 1980	--	--	- 1.6	--	--	- 2.9
	01449700 Wild Creek Reservoir			01449790 Beltzville Lake		
Sept. 30	819.50	11900	--	628.12	41360	--
Oct. 31	820.29	12090	+ 3.1	627.80	41060	- 4.9
Nov. 30	818.71	11720	- 6.2	628.67	41890	+ 13.9
Dec. 31	819.12	11820	+ 1.6	628.35	41580	- 5.0
CAL YR 1979	--	--	+ 0.3	--	--	+ 3.3
Jan. 31	818.05	11540	- 4.6	627.49	40770	- 13.2
Feb. 29	818.72	11730	+ 3.3	627.33	40610	- 2.8
Mar. 31	819.84	11760	+ 0.5	628.30	41540	+ 15.1
Apr. 30	820.40	12120	+ 6.1	628.68	41900	+ 6.1
May 31	815.57	10860	- 20.5	627.95	41200	- 11.4
June 30	807.77	8800	- 34.6	627.46	40740	- 7.7
July 31	815.32	10790	+ 32.4	626.90	40200	- 8.8
Aug. 31	817.96	11520	+ 11.9	622.90	36610	- 58.4
Sept. 30	817.86	11490	- 0.5	612.86	28800	-131.3
WTR YR 1980	--	--	- 0.6	--	--	- 17.3

TOHICKON CREEK BASIN

01459500 TOHICKON CREEK NEAR PIPERSVILLE, PA

LOCATION.--Lat 40°26'01", long 75°07'01", Bucks County, Hydrologic Unit 02040105, on right bank at highway bridge, 1.5 mi (2.4 km) northeast of Pipersville, and 4.5 mi (7.2 km) upstream from mouth.

DRAINAGE AREA.--97.4 mi^2 (252.3 km^2).

PERIOD OF RECORD.--July 1935 to current year.

REVISED RECORDS.--WDR PA-75-1: 1974.

GAGE.--Water-stage recorder. Datum of gage is 258.96 ft (78.931 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for periods of missing record August 2 to September 3, which are poor. Regulation at low flow by mills above station, and since December 1973 by Nockamixon Lake about 6.2 mi (10.0 km) upstream. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--45 years, 146 ft^3/s (4.135 m^3/s), 20.39 in/yr (518 mm/yr), adjusted for storage since December 1973.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,000 ft^3/s (453 m^3/s) Aug. 18, 1955, gage height, 11.26 ft (3.432 m), from rating curve extended above 3,600 ft^3/s (102 m^3/s) on basis of slope-area measurement at gage height 10.48 ft (3.194 m); minimum, 0.05 ft^3/s (0.001 m^3/s) Sept. 29, 1941; minimum daily, 0.1 ft^3/s (0.003 m^3/s) Sept. 24, 29, Oct. 6, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,070 ft^3/s (115 m^3/s) March 20, gage height, 6.50 ft (1.981 m); minimum, 3.2 ft^3/s (0.091 m^3/s) many days in Aug. and Sept., gage height, 0.69 ft (0.210 m) but may have been less during period of plugged intakes.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	588	54	510	72	61	40	267	37	20	12	8.1	3.4
2	708	139	504	67	54	37	492	34	22	11	7.7	3.4
3	432	846	498	61	49	33	231	32	108	10	7.3	3.3
4	480	546	492	54	38	30	136	30	142	9.2	7.0	3.3
5	415	142	285	52	32	24	95	28	84	9.2	6.8	3.4
6	624	128	103	47	27	25	151	26	48	9.6	18	3.6
7	375	108	136	49	25	24	142	25	36	10	6.6	3.3
8	215	89	89	41	24	43	84	30	33	8.5	6.4	3.3
9	160	78	22	37	22	164	63	31	30	8.5	6.3	3.3
10	756	125	20	34	20	164	51	27	28	8.5	6.1	3.3
11	870	244	19	35	20	215	43	25	31	8.5	6.0	3.4
12	516	588	17	714	18	128	39	23	29	8.5	5.8	3.3
13	438	395	46	540	22	108	34	726	25	8.5	5.7	3.4
14	294	253	61	267	22	160	26	472	25	8.5	5.6	3.5
15	174	151	35	192	22	148	24	231	23	8.5	5.4	7.1
16	115	113	30	136	20	219	22	128	22	8.1	5.3	3.8
17	91	89	40	108	70	1400	22	82	18	9.6	5.1	3.8
18	79	75	27	154	35	1140	31	87	14	10	5.0	12
19	70	390	26	410	25	516	688	84	13	10	4.9	4.8
20	63	732	26	298	27	1220	708	74	14	9.6	4.8	4.0
21	58	726	22	178	17	1500	235	120	15	8.5	4.7	3.7
22	52	606	20	118	23	660	188	174	12	8.1	4.6	3.5
23	49	23	23	103	91	822	178	125	11	8.8	4.4	3.5
24	70	16	51	91	130	321	93	84	10	8.5	4.3	3.3
25	82	15	192	76	110	219	64	67	9.2	8.1	4.2	4.0
26	72	375	145	58	85	624	47	50	8.8	7.7	4.0	4.8
27	58	405	181	50	61	660	61	35	8.8	7.7	3.8	3.8
28	57	390	148	45	50	672	72	26	8.8	7.7	3.7	3.8
29	76	420	110	41	43	316	51	22	8.8	7.7	3.6	3.8
30	75	516	93	60	---	167	39	19	13	7.7	3.5	4.0
31	64	---	79	63	---	105	---	18	---	7.7	3.5	---
TOTAL	8176	8777	4050	4251	1243	11904	4377	2972	870.4	274.5	178.2	120.9
MEAN	264	293	131	137	42.9	384	146	95.9	29.0	8.85	5.75	4.03
MAX	870	846	510	714	130	1500	708	726	142	12	18	12
MIN	49	15	17	34	17	24	22	18	8.8	7.7	3.5	3.3
†	+.33	-18.3	+16.4	-2.28	+.70	+10.7	-3.36	-8.13	-2.35	-1.79	-7.97	-3.03
MEAN‡	264	274	147	135	43.6	395	143	87.7	26.7	7.06	0	1.00
CFSM‡	2.71	2.82	1.51	1.38	.45	4.05	1.46	.90	.27	.07	0	.01
IN.‡	3.13	3.14	1.74	1.60	.48	4.67	1.63	1.04	.31	.08	0	.01

CAL YR 1979 TOTAL 98828.0 MEAN 271 MAX 5250 MIN 11 MEAN‡ 271 CFSM‡ 2.78 IN.‡ 37.77
WTR YR 1980 TOTAL 47194.0 MEAN 129 MAX 1500 MIN 3.3 MEAN‡ 127 CFSM‡ 1.31 IN.‡ 17.81

† Change in contents in Nockamixon Lake, equivalent in cubic feet per second, furnished by Pennsylvania Department of Environmental Resources.

‡ Adjusted for change in contents in Nockamixon Lake.

01463500 DELAWARE RIVER AT TRENTON, NJ
(National stream quality accounting network, Pesticide program, and Radiochemical program station)

LOCATION.--Lat 40°13'18", long 74°46'42", Mercer County, Hydrologic Unit 02040105, on left bank 450 ft (137 m) upstream from Calhoun Street Bridge at Trenton, 0.5 mi (0.8 km) upstream from Assunpink Creek, and at mile 134.5 (216.4 km).

DRAINAGE AREA.--6,780 mi² (17,560 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1913 to current year. October 1912 to February 1913 monthly discharge only, published in WSP 1302. Gage-height records collected in this vicinity since 1904 are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 951: Drainage area. WSP 1302: 1913-20. WSP 1382: 1924, 1928.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1965, at datum 7.77 ft (2.368 m) higher. Feb. 24, 1913, to Oct. 2, 1928, nonrecording gage on downstream side of highway bridge at site 500 ft (152 m) downstream.

REMARKS.--Water-discharge records good. Diurnal fluctuations at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lakes Wallenpaupack and Hopatcong, and by Pepacton, Cannonsville, Swinging Bridge, Toronto, Cliff Lake, Neversink, and Wild Creek Reservoirs (see Delaware River Basin, reservoirs in) and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoirs and to Delaware and Raritan Canal (see Delaware River Basin, diversions). Water diverted just above station by borough of Morrisville, PA, and city of Trenton for municipal supply (see Delaware River Basin, diversions).

AVERAGE DISCHARGE.--68 years, 11,750 ft³/s (332.8 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 329,000 ft³/s (9,320 m³/s) Aug. 20, 1955, elevation, 28.60 ft (8.717 m) from high-water mark in gage house, from rating curve extended above 230,000 ft³/s (6,510 m³/s); minimum, 1,180 ft³/s (33.4 m³/s) Oct. 31, 1963, elevation, 7.26 ft (2.213 m). Flow in Delaware and Raritan Canal not included.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 11, 1903, reached an elevation of about 28.5 ft (8.69 m) National Geodetic Vertical Datum of 1929, discharge estimated, 295,000 ft³/s (8,350 m³/s). Maximum elevation since 1903, 30.6 ft (9.33 m) National Geodetic Vertical Datum of 1929, Mar. 8, 1904, from floodmark (ice jam).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50,000 ft³/s (1,420 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Elevation (ft)	Elevation (m)
Nov. 28	1130	55700	1580	14.45	4.404
Mar. 23	0615	*104000	2950	17.83	5.435
Apr. 11	1130	50400	1430	14.03	4.276

Minimum discharge, 2,420 ft³/s (68.5 m³/s) Aug. 23, Sept. 30, gage height, 7.82 ft (2.384 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10000	7620	20200	9930	4510	3900	39400	32900	5070	4550	3030	3050
2	18900	7260	17200	10100	4000	3460	37100	27600	5930	5430	3230	3100
3	20900	10900	15100	8880	3900	4090	33500	23500	5650	5710	3340	3040
4	25200	16200	13800	9030	4000	3370	32700	19900	7300	4930	3660	2970
5	23000	21500	13700	8640	4800	3760	32400	16800	7270	4570	4210	2930
6	31800	17400	12800	7970	4200	4310	30200	14800	6070	4450	4470	2830
7	32900	14900	12900	6870	4400	3950	25600	14900	5390	5030	4350	3040
8	28900	13300	11700	6160	4500	3860	21500	13600	5520	4490	4070	2830
9	22300	12100	10600	6500	4400	4630	22700	12400	5570	4570	3810	2970
10	24400	11500	9210	6520	4330	5340	34900	11300	5810	4500	3630	2800
11	22900	11700	8550	6360	4270	7110	47800	10600	5780	4200	3490	2740
12	19200	12900	8700	10900	3980	7490	40600	9930	5620	4140	2950	2690
13	17500	11900	8870	11200	3970	6240	31900	14800	5560	4310	2950	2660
14	15500	11200	10500	8880	3760	6230	28200	14300	5020	3800	3130	2840
15	13600	10600	10100	8520	3830	5340	30600	12000	4590	3710	3070	3220
16	11900	9710	9510	8600	3970	6330	34800	10900	4310	3460	3050	3070
17	11900	9020	8810	8270	4000	5950	33000	9730	4270	3840	3140	2870
18	11300	8680	8240	7580	3650	14100	28300	8810	4240	3780	3080	3730
19	11100	8530	8130	9160	3480	23200	23900	8300	4320	3710	2910	3660
20	10300	8600	7960	8540	3670	27500	20200	8180	4170	3500	2730	3480
21	9680	8290	7700	7400	3780	29500	17600	8680	4080	3200	2820	3280
22	8310	8030	7580	6770	4300	69800	16100	9440	4030	3100	2500	3150
23	7810	7800	8120	6420	4850	88700	15300	8660	4000	3260	2560	2800
24	8420	7110	7920	6520	4990	52000	13800	7780	4060	4350	2650	2720
25	9790	6930	9410	6240	5380	46800	12800	7110	3900	3930	2640	3070
26	9880	8130	14300	5580	4720	40600	11800	6550	3730	3660	2650	2840
27	10000	30300	17000	5630	4140	34100	11300	5900	3650	3380	2770	2770
28	9020	48700	15600	5260	3670	26500	13400	5530	3680	3220	3080	2850
29	8160	35200	13600	5390	3640	25700	23100	5160	3590	3150	3140	2800
30	7860	25600	12100	4950	---	29200	33800	4840	4040	3130	3000	2640
31	7770	---	10700	4720	---	35700	---	4620	---	3200	3020	---
TOTAL	480200	421610	350610	233490	121090	628760	798300	369520	146220	124260	99130	89440
MEAN	15490	14050	11310	7532	4176	20280	26610	11920	4874	4008	3198	2981
MAX	32900	48700	20200	11200	5380	88700	47800	32900	7300	5710	4470	3730
MIN	7770	6930	7580	4720	3480	3370	11300	4620	3590	3100	2500	2640

CAL YR 1979 TOTAL 5754040 MEAN 15760 MAX 106000 MIN 3300
WTR YR 1980 TOTAL 3862630 MEAN 10550 MAX 88700 MIN 2500

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1945 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June 1968 to September 1978, May 1979 to current year.
pH: June 1968 to September 1978, May to September 1978, February to September 1980.
WATER TEMPERATURES: October 1944 to September 1978, May 1979 to current year.
DISSOLVED OXYGEN: October 1962 to September 1978, May 1979 to current year.
SUSPENDED-SEDIMENT DISCHARGE: September 1949 to current year.

INSTRUMENTATION.--Temperature recorder since October 1944, water-quality recorder since October 1962.

REMARKS.--Missing continuous water-quality records are the result of malfunction of sensor or sampling mechanism.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 400 micromhos Jan. 24, 1959; minimum, 50 micromhos Mar. 19, 1945.
pH: Maximum, 10.2 July 5, 6, 1971, June 14, 15, 1974; minimum, 5.3 June 22, 1972.
WATER TEMPERATURES: Maximum, 34.0°C June 18, 1957; minimum 0.0°C on many days during winter months.
DISSOLVED OXYGEN: Maximum, 18.4 mg/L January 10, 1980; minimum, 4.0 mg/L Nov. 9, 1972.
SEDIMENT CONCENTRATIONS: Maximum daily, 1,720 mg/L Nov. 26, 1950; minimum daily, less than 0.5 mg/L Oct. 21, 1952 and Jan. 18, 1970.
SEDIMENT LOADS: Maximum daily, 1,087,000 tons (986,126 tonnes) Aug. 20, 1955; minimum daily, less than 0.5 ton (0.45 tonnes) Oct. 21, 1952.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 550 mg/L Mar. 22, 1980; minimum daily mean, 1 mg/L on several days during January, February and March.
SEDIMENT LOADS: Maximum daily, 104,000 tons (94,000 Mg) Mar. 22, 1980; minimum daily, 9.1 tons (8.3 Mg) Mar. 4, 1980.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV 29...	1330	33600	81	7.1	8.5	5.0	11.2	32	1.6	5700	2000
DEC 12...	1230	9110	160	7.6	5.0	1.0	13.3	5	1.0	90	26
JAN 23...	1130	6140	192	8.1	3.5	.50	13.8	16	1.3	15	K11
FEB 13...	1130	3880	223	8.7	2.5	.80	16.9	--	1.6	K7	34
MAR 26...	1200	41000	98	7.3	4.0	.50	14.0	12	1.9	140	230
APR 23...	1200	15200	128	7.7	13.0	1.0	10.7	11	1.5	100	K52
MAY 15...	1230	12000	151	7.7	17.5	1.6	10.4	--	2.0	150	87
JUN 18...	1200	4080	212	9.2	24.0	.30	11.8	--	4.1	8	200
JUL 24...	1130	4220	224	8.8	28.0	3.0	8.9	--	3.0	K39	200
AUG 12...	1100	2890	198	8.5	27.5	2.3	8.1	--	2.3	K9	660
SEP 16...	1305	3030	225	8.3	22.0	.30	9.1	14	1.9	71	290

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
NOV 29...	31	8.5	2.4	3.2	1.2	22	12	5.1	.1	4.6
DEC 12...	61	16	5.1	7.0	1.3	34	21	9.9	.1	4.6
JAN 23...	71	18	6.4	8.5	1.1	46	25	11	.1	4.1
FEB 13...	83	22	6.9	9.8	1.6	52	26	14	.1	2.2
MAR 26...	33	8.9	2.7	4.9	1.1	16	13	6.9	.1	4.0
APR 23...	45	12	3.7	5.0	1.1	25	16	8.0	.1	3.0
MAY 15...	56	14	5.0	7.7	1.1	31	19	9.2	.1	4.1
JUN 18...	83	21	7.3	9.3	1.6	52	26	14	.1	1.9
JUL 24...	86	22	7.6	9.6	1.9	62	29	13	.1	3.8
AUG 12...	70	18	6.2	8.9	1.6	45	22	12	.1	3.1
SEP 16...	79	20	7.1	10	1.9	46	26	14	.1	2.6

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)
NOV 29...	54	104	9440	68	.62	.58	.060	.060	.81	.52
DEC 12...	98	10	246	14	1.1	1.1	.110	.090	.41	.07
JAN 23...	98	1	17	40	1.3	1.1	--	.070	--	.38
FEB 13...	118	1	10	50	1.2	1.2	.080	.080	.20	.20
MAR 26...	67	37	4100	48	.96	.89	.100	.100	.25	.16
APR 23...	80	9	369	63	.75	.72	.050	.050	.24	.13
MAY 15...	94	17	551	70	1.0	1.0	.070	.070	.29	.24
JUN 18...	125	13	143	63	1.1	1.1	.040	.020	.60	.24
JUL 24...	149	9	103	86	1.0	1.0	.010	.000	.18	.16
AUG 12...	100	3	23	70	.72	.70	.020	.010	.25	.19
SEP 16...	138	4	33	65	1.2	1.2	.020	.020	.28	.14

DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)
NOV 29...	.87	.29	.58	1.2	1.5	.110	.110	--	4.3	2.1
DEC 12...	.52	.36	.16	1.3	1.6	.070	.060	2.8	--	--
JAN 23...	--	--	.45	1.6	--	.170	.060	2.7	--	--
FEB 13...	.28	.00	.28	1.5	1.5	.100	.090	--	3.0	.8
MAR 26...	.35	.09	.26	1.2	1.3	.060	.030	5.0	--	--
APR 23...	.29	.11	.18	.90	1.0	.050	.030	2.1	--	--
MAY 15...	.36	.05	.31	1.3	1.4	.060	.050	--	3.6	.3
JUN 18...	.64	.38	.26	1.4	1.7	.100	.050	2.0	--	--
JUL 24...	.19	.03	.16	1.2	1.2	.130	.060	3.6	--	--
AUG 12...	.27	.07	.20	.90	.99	.100	.070	--	3.1	.4
SEP 16...	.30	.14	.16	1.4	1.5	.130	.110	2.6	--	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
NOV 29...	1330	1	0	1	40	0	40	2	0	2	10
FEB 13...	1130	1	0	1	100	70	30	2	0	2	<10
MAY 15...	1230	2	1	1	<50	--	30	0	0	0	10
AUG 12...	1100	1	0	1	100	--	<50	0	0	<10	<10

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
NOV 29...	0	10	5	0	5	8	5	3	2600	1800	790
FEB 13...	0	<10	0	0	0	7	4	3	140	120	20
MAY 15...	--	<10	0	0	0	5	1	4	350	310	40
AUG 12...	--	<10	0	0	0	4	1	3	180	160	20

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)
NOV 29...	7	5	2	260	140	120	<.1	.0	<.1	5	4
FEB 13...	4	4	0	40	10	30	<.1	.0	<.1	3	1
MAY 15...	4	4	0	50	40	10	.2	.0	.2	1	1
AUG 12...	3	0	3	60	50	10	.1	--	<.1	4	4

DATE	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)
NOV 29...	1	0	0	0	0	0	0	70	30	40	<.8
FEB 13...	2	1	1	0	0	0	0	40	0	40	--
MAY 15...	0	0	0	0	0	0	0	50	30	20	<1.3
AUG 12...	0	0	0	0	0	0	0	20	20	0	--

DATE	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS ALPHA, DISSOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM DISSOLVED, EXTRACTION (UG/L)	PCB TOTAL (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)
NOV 29...	4.3	<.5	2.9	1.8	3.5	1.7	3.6	.04	.20	ND	ND
FEB 13...	--	--	--	--	--	--	--	--	--	ND	--
MAY 15...	<.4	<.9	<.3	1.4	<.4	1.4	<.4	.04	.09	--	--
AUG 12...	--	--	--	--	--	--	--	--	--	--	--

DATE	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL (UG/L)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	P,P' DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL (UG/L)	O,P' DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	P,P' DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL (UG/L)	O,P' DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	P,P' DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)
NOV 29...	ND	ND	ND	ND	6.8	ND	ND	18	ND	ND	36
FEB 13...	ND	--	ND	--	--	ND	--	--	ND	--	--
MAY 15...	--	--	--	--	--	--	--	--	--	--	--
AUG 12...	--	--	--	--	--	--	--	--	--	--	--

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	DDT, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	DI-AZINON, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN TOTAL (UG/L)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ETHION, TOTAL (UG/L)	ETHION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
NOV											
29...	ND	ND	ND	ND	.9	ND	ND	ND	ND	ND	ND
FEB											
13...	ND	ND	--	ND	--	ND	--	ND	--	ND	--
MAY											
15...	--	--	--	--	--	--	--	--	--	--	--
AUG											
12...	--	--	--	--	--	--	--	--	--	--	--

DATE	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	MALA-THION, TOTAL (UG/L)	MALA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOTAL (UG/L)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA-THION, TOTAL (UG/L)	METHYL PARA-THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI-THION, TOTAL (UG/L)
NOV											
29...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB											
13...	ND	--	ND	--	ND	--	ND	--	ND	--	ND
MAY											
15...	--	--	--	--	--	--	--	--	--	--	--
AUG											
12...	--	--	--	--	--	--	--	--	--	--	--

DATE	METHYL TRI-THION, TOT. IN BOTTOM MATL. (UG/KG)	PARA-THION, TOTAL (UG/L)	PARA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TOX-APHENE, TOTAL (UG/L)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TOTAL TRI-THION (UG/L)	TRI-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
NOV										
29...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB										
13...	--	ND	--	ND	--	ND	--	--	--	--
MAY										
15...	--	--	--	--	--	--	--	--	--	--
AUG										
12...	--	--	--	--	--	--	--	--	--	--

DATE	LENGTH OF EXPO-SURE (DAYS)	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	BIOMASS CHLORO-PHYLL RATIO PERI-PHYTON (UNITS)
DEC						
12...	12	.870	.790	.090	.000	889
JAN						
17...	23	14.2	12.9	3.34	.250	389
APR						
23...	27	21.3	19.4	17.9	.000	106
MAY						
15...	21	13.6	12.1	5.98	.820	251
AUG						
08...	14	1.65	1.02	3.04	.830	207

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1							---	---	---	147	144	146
2							---	---	---	148	144	147
3							---	---	---	149	142	144
4							---	---	---	159	150	155
5							---	---	---	159	153	155
6							---	---	---	162	155	157
7							---	---	---	168	164	166
8							---	---	---	180	169	175
9							---	---	---	190	181	186
10							---	---	---	193	181	187
11							---	---	---	194	177	191
12							---	---	---	198	157	174
13							161	156	---	182	177	179
14							161	157	159	177	167	180
15							161	159	160	172	169	171
16							157	149	153	175	170	171
17							157	147	150	174	169	---
18							164	157	160	---	---	---
19							164	162	163	---	---	---
20							165	160	163	---	---	---
21							166	161	163	---	---	---
22							174	166	169	---	---	---
23							173	163	166	---	---	---
24							178	166	174	---	---	---
25							182	173	179	---	---	---
26							180	164	174	---	---	---
27							160	129	143	---	---	---
28							131	126	128	---	---	---
29							136	129	134	---	---	---
30							139	134	136	---	---	---
31							146	138	142	---	---	---
MONTH							182	126	156	198	142	168

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	121	106	116	131	102	118
2	---	---	---	---	---	---	120	115	118	124	104	114
3	---	---	---	246	240	---	118	116	117	126	110	116
4	---	---	---	246	229	237	117	114	116	121	116	118
5	---	---	---	243	231	238	120	115	118	125	118	121
6	---	---	---	236	229	232	114	111	112	133	119	127
7	---	---	---	230	218	223	114	111	113	135	120	128
8	---	---	---	232	223	227	133	113	123	137	119	130
9	---	---	---	232	223	227	133	123	130	138	118	130
10	---	---	---	226	219	222	135	120	130	145	122	138
11	---	---	---	225	190	208	117	94	103	150	126	146
12	---	---	---	188	171	176	96	92	94	155	148	151
13	---	---	---	177	168	171	102	95	98	158	148	153
14	---	---	---	209	177	195	105	100	102	162	143	150
15	---	---	---	207	200	203	109	104	107	155	137	151
16	236	223	230	219	203	211	106	103	104	169	157	162
17	236	229	233	209	203	206	106	101	103	172	153	168
18	---	---	---	201	146	169	105	103	104	179	156	173
19	---	---	---	208	152	179	118	105	112	186	168	180
20	---	---	---	151	119	130	123	114	120	184	173	182
21	243	235	---	124	102	114	132	122	126	188	183	185
22	247	241	243	127	81	108	136	130	133	187	177	182
23	249	238	242	79	74	76	137	133	135	184	178	181
24	249	237	241	89	80	85	145	136	141	186	176	180
25	250	242	246	100	90	96	150	145	148	188	179	182
26	244	228	234	100	97	99	160	150	156	187	181	184
27	---	---	---	103	98	101	168	161	165	191	185	189
28	---	---	---	113	103	108	182	164	170	196	189	193
29	---	---	---	121	113	117	177	156	169	203	195	199
30	---	---	---	119	113	117	150	125	136	207	201	204
31	---	---	---	112	105	107	---	---	---	221	206	210
MONTH	250	223	238	246	74	164	182	92	124	221	102	160

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEC. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	226	215	220	228	220	224	228	218	223	210	199	206
2	223	218	221	228	198	215	221	217	219	208	200	206
3	222	203	211	197	177	185	223	218	221	211	205	208
4	212	201	205	175	172	174	220	214	217	206	196	211
5	216	200	207	179	173	176	218	209	---	204	197	201
6	201	192	196	182	173	178	---	---	---	215	198	205
7	197	192	194	201	181	189	---	---	---	213	201	210
8	205	198	202	202	190	198	---	---	---	219	213	216
9	---	---	---	217	202	208	---	---	---	222	214	219
10	---	---	---	222	203	212	---	---	---	225	219	222
11	---	---	---	210	201	204	---	---	---	221	217	219
12	---	---	---	216	204	212	---	---	---	233	221	222
13	---	---	---	216	211	214	217	209	---	238	230	235
14	---	---	---	213	208	210	225	215	221	250	246	248
15	---	---	---	216	207	210	225	215	220	259	223	251
16	---	---	---	220	210	217	---	---	---	262	253	258
17	220	210	214	230	218	223	---	---	---	267	182	227
18	220	213	216	226	213	---	---	---	---	237	138	192
19	---	---	---	---	---	---	---	---	---	261	190	204
20	---	---	---	---	---	---	---	---	---	226	211	---
21	---	---	---	---	---	---	---	---	---	239	227	232
22	---	---	---	---	---	---	---	---	---	238	225	232
23	---	---	---	---	---	---	229	217	220	239	219	---
24	---	---	---	224	204	---	234	229	232	---	---	---
25	225	217	221	218	212	215	239	235	237	---	---	---
26	227	216	220	221	211	217	237	226	232	---	---	---
27	239	221	225	220	207	211	234	224	228	---	---	---
28	254	234	244	208	200	204	229	222	226	---	---	---
29	255	233	240	212	195	204	237	229	233	232	228	---
30	235	210	228	215	206	211	239	225	233	246	223	230
31	---	---	---	224	211	215	227	211	219	---	---	---
MONTH	255	192	217	230	172	205	239	209	225	267	138	221

PH (STANDARD UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
MONTH												

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	7.1	7.0	7.1	7.5	7.4	7.4
2	---	---	---	---	---	---	7.2	7.1	7.2	7.6	7.4	7.5
3	---	---	---	---	---	---	7.2	7.2	7.2	7.5	7.3	7.4
4	---	---	---	9.3	8.5	9.0	7.2	7.2	7.2	7.4	7.2	7.3
5	---	---	---	9.3	8.5	8.9	7.3	7.2	7.3	7.6	7.2	7.4
6	---	---	---	9.3	8.3	8.9	7.3	7.2	7.3	8.0	7.3	7.6
7	---	---	---	9.0	8.4	8.7	7.4	7.3	7.3	8.2	7.3	7.7
8	---	---	---	8.9	7.9	8.4	7.4	7.3	7.3	7.7	7.3	7.5
9	---	---	---	8.5	7.5	8.0	7.4	7.2	7.3	8.0	7.4	7.6
10	---	---	---	8.7	7.5	8.1	7.3	7.2	7.3	8.3	7.3	7.8
11	---	---	---	8.4	7.8	8.0	7.3	7.3	7.3	8.1	7.4	7.8
12	---	---	---	8.6	7.8	8.2	7.3	7.3	7.3	8.1	7.3	7.5
13	---	---	---	8.6	7.7	8.0	7.5	7.3	7.4	7.4	7.2	7.3
14	---	---	---	8.2	7.6	7.8	7.5	7.4	7.5	7.4	7.2	7.3
15	---	---	---	8.5	7.6	8.0	7.5	7.5	7.5	7.8	7.3	7.5
16	9.1	8.5	8.8	8.5	7.7	8.1	7.5	7.5	7.5	7.8	7.3	7.5
17	9.3	8.3	8.8	8.5	7.5	7.9	7.5	7.5	7.5	8.1	7.2	7.6
18	---	---	---	7.5	7.2	7.3	7.6	7.6	7.6	7.8	7.3	7.5
19	---	---	---	7.4	7.2	7.3	7.6	7.5	7.6	8.3	7.3	7.8
20	---	---	---	7.2	7.2	7.2	7.6	7.5	7.6	8.3	7.5	7.9
21	9.0	8.5	---	7.2	6.7	7.0	7.6	7.4	7.5	7.8	7.5	7.6
22	8.7	7.9	8.4	7.2	6.8	7.0	7.6	7.4	7.5	8.3	7.5	7.9
23	8.7	7.7	8.2	6.7	6.7	6.7	7.7	7.4	7.5	8.6	7.7	8.0
24	8.8	7.8	8.2	6.9	6.8	6.8	7.9	7.4	7.6	8.6	7.7	8.2
25	8.8	7.8	8.3	6.9	6.9	6.9	7.7	7.2	7.5	8.9	7.8	8.4
26	8.9	8.0	8.5	7.0	6.9	7.0	7.5	7.2	7.3	9.1	8.2	8.8
27	---	---	---	7.0	7.0	7.0	7.7	7.3	7.4	9.3	8.6	9.0
28	---	---	---	7.1	7.0	7.0	7.8	7.4	7.5	9.3	8.8	9.1
29	---	---	---	7.1	7.1	7.1	7.5	7.5	7.5	9.3	8.8	9.1
30	---	---	---	7.1	7.1	7.1	7.5	7.4	7.5	9.2	8.8	9.0
31	---	---	---	7.1	7.0	7.1	---	---	---	9.1	8.5	8.8
MONTH	9.3	7.7	8.5	9.3	6.7	7.7	7.9	7.0	7.4	9.3	7.2	7.9

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	9.1	8.1	8.7	9.0	8.3	8.7	8.9	8.4	8.6	8.5	7.7	8.1
2	8.5	7.9	8.3	9.0	8.3	8.7	9.0	8.3	8.7	8.5	7.7	8.1
3	8.4	7.5	7.8	8.5	8.2	8.4	9.0	8.4	8.7	8.4	7.7	8.0
4	8.2	7.4	7.7	8.9	8.1	8.5	8.8	8.3	8.6	8.5	7.6	8.1
5	8.0	7.3	7.6	9.0	8.2	8.6	8.5	7.9	---	8.3	7.7	8.0
6	8.2	7.4	7.7	9.2	8.3	8.8	---	---	---	8.5	7.6	8.0
7	8.4	7.4	7.9	8.9	8.5	8.8	---	---	---	8.5	7.7	8.1
8	8.5	7.6	8.0	9.0	8.3	8.7	---	---	---	8.9	7.9	8.5
9	---	---	---	9.1	8.5	8.8	---	---	---	9.1	8.7	8.9
10	---	---	---	9.1	8.5	8.9	---	---	---	8.9	8.4	8.7
11	---	---	---	9.2	8.5	8.8	---	---	---	8.8	8.1	8.5
12	---	---	---	9.1	8.4	8.8	---	---	---	8.7	.1	8.4
13	---	---	---	9.2	8.5	8.9	9.1	8.9	---	8.7	7.9	8.3
14	---	---	---	9.2	8.5	8.9	9.2	8.5	8.9	8.5	7.9	8.2
15	---	---	---	9.3	8.7	9.1	9.1	8.6	8.9	8.3	7.6	7.9
16	---	---	---	9.3	8.8	9.0	---	---	---	8.4	7.7	8.0
17	9.3	8.5	8.9	9.1	8.5	8.8	---	---	---	8.3	7.7	7.9
18	9.3	8.8	9.1	9.0	8.3	8.7	---	---	---	8.0	7.4	7.7
19	---	---	---	9.1	8.4	8.8	---	---	---	8.0	7.5	7.7
20	---	---	---	9.2	8.4	8.9	---	---	---	8.1	7.4	7.7
21	---	---	---	9.2	8.6	8.9	---	---	---	8.3	7.4	7.8
22	---	---	---	9.2	8.0	8.9	---	---	---	8.3	7.4	7.8
23	---	---	---	9.0	8.3	8.7	8.6	7.8	8.2	8.3	7.4	7.8
24	---	---	---	9.0	8.3	8.7	8.6	7.8	8.3	8.4	7.4	7.8
25	9.4	9.0	9.2	9.2	8.4	8.8	8.6	7.8	8.3	---	---	---
26	9.5	9.1	9.3	9.3	8.6	9.0	8.7	7.9	8.3	---	---	---
27	9.4	9.0	9.2	9.3	8.6	9.0	8.7	8.0	8.4	---	---	---
28	9.4	9.0	9.2	9.2	8.6	8.9	8.7	8.0	8.3	---	---	---
29	9.3	8.8	9.0	8.9	8.3	8.6	8.5	7.9	8.2	8.7	8.2	---
30	9.0	8.3	8.7	9.1	8.2	8.7	8.5	7.8	8.1	8.7	7.8	8.2
31	---	---	---	9.0	8.3	8.7	8.5	7.8	8.2	---	---	---
MONTH	9.5	7.3	8.5	9.3	8.0	8.8	9.2	7.8	8.5	9.1	7.4	8.1

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1							---	---	---	4.5	4.0	4.0
2							---	---	---	4.0	3.5	4.0
3							5.0	5.0	---	4.0	3.5	3.5
4							5.0	4.5	4.5	3.5	3.0	3.0
5							5.0	4.0	4.5	3.0	2.5	3.0
6							5.0	4.5	4.5	3.0	2.0	2.5
7							6.0	5.0	5.5	2.5	2.0	2.5
8							6.5	5.5	6.0	3.0	2.0	2.5
9							6.0	5.0	5.5	3.0	2.5	2.5
10							6.0	5.0	5.5	3.0	2.0	2.5
11							6.0	5.0	5.5	5.0	2.0	3.5
12							7.0	6.0	6.5	5.5	3.5	4.5
13							7.0	6.5	6.5	3.5	3.0	3.5
14							6.5	6.0	6.0	4.0	3.0	3.5
15							6.0	5.5	6.0	5.5	4.0	4.5
16							5.5	5.0	5.0	5.5	4.5	5.0
17							5.5	3.0	4.5	5.0	4.5	---
18							3.0	2.5	3.0	---	---	---
19							2.5	2.0	2.0	---	---	---
20							2.0	1.5	2.0	---	---	---
21							2.0	1.5	2.0	---	---	---
22							3.0	2.0	2.5	---	---	---
23							4.0	3.0	3.5	---	---	---
24							5.0	4.0	4.5	---	---	---
25							6.5	5.0	6.0	---	---	---
26							7.0	6.0	6.5	---	---	---
27							6.0	5.0	5.5	---	---	---
28							5.0	4.5	5.0	---	---	---
29							5.0	4.0	4.5	---	---	---
30							5.5	4.5	5.0	---	---	---
31							5.0	4.5	4.5	---	---	---
MONTH							7.0	1.5	4.5	5.5	2.0	3.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	6.5	5.0	6.0	12.5	11.0	11.5
2	---	---	---	---	---	---	7.0	6.0	6.5	14.0	12.5	13.0
3	---	---	---	2.0	.0	---	8.0	6.5	7.0	16.0	13.5	14.5
4	---	---	---	4.0	.0	2.0	8.5	7.5	8.0	16.5	15.0	15.5
5	---	---	---	4.0	2.5	3.0	9.0	8.0	8.5	17.5	15.5	16.5
6	---	---	---	6.5	3.5	5.0	9.5	8.0	8.5	18.5	17.0	17.5
7	---	---	---	6.0	4.5	5.0	10.0	8.5	9.5	19.0	17.0	18.0
8	---	---	---	8.0	5.5	7.0	10.5	9.5	10.0	18.5	16.5	17.0
9	---	---	---	8.5	6.5	7.5	11.0	10.5	11.0	16.5	15.5	16.0
10	---	---	---	9.0	6.0	7.5	12.0	10.5	11.5	17.0	15.0	16.0
11	---	---	---	8.0	5.5	7.0	11.5	11.0	11.0	16.0	15.5	15.5
12	---	---	---	5.5	4.0	5.0	11.0	10.0	11.0	16.0	15.0	15.5
13	---	---	---	4.5	2.0	3.5	12.0	10.5	11.5	17.5	15.5	16.5
14	---	---	---	2.5	2.0	2.0	12.0	11.0	11.5	18.0	16.5	17.5
15	---	---	---	4.5	1.5	3.0	11.5	11.0	11.5	18.5	16.5	17.5
16	3.0	1.5	2.5	5.5	2.5	4.0	10.5	9.5	10.0	18.5	16.5	17.5
17	2.0	.5	1.5	6.5	4.5	5.5	9.5	8.5	9.0	19.0	17.0	18.0
18	---	---	---	6.5	5.5	6.0	10.0	8.5	9.0	17.5	17.0	17.0
19	---	---	---	6.5	5.5	6.0	10.5	9.0	10.0	19.0	17.0	18.0
20	---	---	---	5.5	4.5	5.0	12.0	10.0	11.0	19.0	18.5	18.5
21	6.5	3.5	---	7.0	5.0	6.0	13.5	11.5	12.5	18.5	17.5	18.0
22	5.0	4.0	4.5	6.0	3.5	5.0	14.0	12.0	13.0	20.0	17.0	18.5
23	6.0	4.0	5.0	3.0	2.0	2.5	14.5	12.5	13.5	22.0	19.5	20.5
24	6.5	5.0	5.5	4.5	3.0	4.0	15.0	13.0	14.0	22.5	21.0	21.5
25	6.0	4.5	5.0	4.5	4.5	4.5	15.0	14.0	14.5	24.0	21.0	22.0
26	5.5	2.5	4.0	4.5	4.0	4.5	14.5	13.5	14.0	23.0	20.5	21.5
27	---	---	---	5.5	4.0	5.0	13.5	13.0	13.5	21.5	19.5	20.5
28	---	---	---	6.5	5.0	5.5	13.0	11.5	12.5	22.0	19.0	20.5
29	---	---	---	7.0	6.0	6.5	12.0	11.5	11.5	23.5	20.0	21.5
30	---	---	---	7.5	6.5	7.0	11.5	11.0	11.5	22.0	20.5	21.0
31	---	---	---	7.0	5.5	6.5	---	---	---	22.5	20.0	21.0
MONTH	6.5	.5	4.0	9.0	.0	5.0	15.0	5.0	11.0	24.0	11.0	18.0

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	24.5	20.5	22.5	27.5	24.0	25.5	30.5	27.5	28.5	30.5	26.5	28.5
2	24.0	23.0	23.5	27.5	24.5	25.5	30.5	27.0	28.5	31.0	27.5	29.0
3	25.0	22.5	23.0	25.5	24.5	25.0	31.5	27.5	29.0	30.0	27.0	28.5
4	23.0	21.0	22.0	27.5	23.5	25.5	31.5	28.0	29.5	29.0	25.5	27.0
5	23.0	20.5	21.5	26.5	24.5	25.5	31.0	28.0	---	27.0	25.5	26.0
6	23.0	20.5	21.5	26.5	24.0	25.0	---	---	---	29.0	25.0	26.5
7	24.5	21.0	22.5	26.0	22.5	24.0	---	---	---	28.0	25.0	26.5
8	24.5	21.0	23.0	25.5	23.5	24.5	---	---	---	27.5	23.5	25.5
9	---	---	---	27.5	23.5	25.5	---	---	---	26.5	23.0	24.5
10	---	---	---	28.0	25.0	26.5	---	---	---	27.0	23.5	25.0
11	---	---	---	29.0	25.5	27.0	---	---	---	26.0	22.0	24.0
12	---	---	---	28.5	25.5	27.0	---	---	---	26.0	22.5	24.0
13	---	---	---	28.5	24.5	26.5	29.5	27.5	---	26.0	22.0	23.5
14	---	---	---	29.5	24.5	27.0	28.5	26.0	27.5	25.0	23.5	24.0
15	---	---	---	29.0	25.5	27.0	27.5	26.0	27.0	24.5	22.5	23.0
16	---	---	---	30.0	26.0	27.5	---	---	---	23.0	21.0	22.0
17	25.5	20.5	23.0	29.0	26.5	27.5	---	---	---	22.5	20.5	21.5
18	24.5	21.5	23.0	30.0	26.5	28.5	---	---	---	24.0	21.5	22.5
19	---	---	---	30.5	27.5	---	---	---	---	24.0	21.0	22.5
20	---	---	---	---	---	---	---	---	---	24.0	21.0	22.0
21	---	---	---	---	---	---	---	---	---	25.5	21.5	23.0
22	---	---	---	---	---	---	---	---	---	27.0	23.0	24.5
23	---	---	---	---	---	---	27.5	22.5	25.0	26.5	24.0	25.0
24	---	---	---	---	---	---	28.5	23.5	26.0	25.0	22.0	23.0
25	28.0	24.0	26.0	30.5	25.5	---	28.5	24.5	26.5	---	---	---
26	28.5	24.5	26.5	31.0	26.0	28.5	30.0	25.0	27.0	---	---	---
27	29.5	25.5	27.0	30.5	27.0	28.5	29.5	26.0	27.5	---	---	---
28	29.0	26.0	27.0	28.5	26.5	27.5	29.5	26.0	28.0	---	---	---
29	28.5	25.5	26.5	27.5	26.0	27.0	28.0	26.0	27.0	19.0	18.0	---
30	27.0	25.0	26.0	30.0	26.0	28.0	28.5	25.5	27.0	20.0	17.5	18.5
31	---	---	---	30.5	26.5	28.5	29.5	26.0	27.5	---	---	---
MONTH	29.5	20.5	24.0	31.0	22.5	26.5	31.5	22.5	27.5	31.0	17.5	24.5

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1							---	---	---	15.0	13.4	14.1
2							---	---	---	15.5	14.5	15.0
3							12.6	12.1	---	16.4	14.4	15.3
4							13.0	12.1	12.5	16.7	14.9	15.6
5							13.1	12.5	12.8	16.8	15.1	15.8
6							14.3	12.6	13.6	17.4	15.2	16.2
7							13.7	13.3	13.4	17.5	15.4	16.3
8							13.3	12.8	13.1	18.0	15.6	16.5
9							13.6	12.8	13.2	18.3	15.9	16.9
10							13.8	13.0	13.4	18.4	15.8	16.9
11							13.7	12.9	13.2	17.7	14.1	16.0
12							13.2	12.4	12.8	14.0	12.8	13.3
13							12.5	11.8	12.2	14.2	13.1	13.6
14							13.1	12.2	12.6	14.7	13.6	14.0
15							13.7	12.5	13.1	14.9	13.2	13.8
16							13.7	13.2	13.4	14.6	12.5	13.5
17							14.5	13.2	13.9	15.0	13.4	---
18							15.1	13.7	14.4	---	---	---
19							15.4	14.5	14.8	---	---	---
20							15.9	14.8	15.1	---	---	---
21							16.2	15.3	15.7	---	---	---
22							15.9	14.9	15.3	---	---	---
23							15.2	13.2	14.7	---	---	---
24							14.6	13.6	14.1	---	---	---
25							14.0	12.5	13.3	---	---	---
26							12.6	10.6	11.9	---	---	---
27							12.2	11.9	12.1	---	---	---
28							13.7	12.3	12.9	---	---	---
29							13.9	13.0	13.4	---	---	---
30							14.2	13.2	13.6	---	---	---
31							14.6	13.2	13.8	---	---	---
MONTH							16.2	10.6	13.5	18.4	12.5	15.2

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	12.9	12.4	12.7	10.7	10.2	10.5
2	---	---	---	---	---	---	12.8	12.3	12.6	10.7	9.6	10.2
3	---	---	---	---	---	---	13.1	12.7	12.9	10.2	8.9	8.7
4	---	---	---	18.0	14.7	15.5	12.8	11.5	12.3	9.4	8.3	9.0
5	---	---	---	17.0	13.9	15.2	11.8	11.4	11.6	9.3	8.5	8.9
6	---	---	---	17.2	13.0	14.9	12.2	11.3	11.8	10.4	8.9	9.6
7	---	---	---	17.0	12.9	14.3	12.1	11.5	11.8	11.4	10.0	10.6
8	---	---	---	15.2	11.8	13.4	11.8	10.9	11.4	10.9	10.1	10.6
9	---	---	---	12.7	10.0	11.5	11.2	10.4	10.9	12.2	10.6	11.3
10	---	---	---	13.5	10.3	11.6	10.5	9.7	10.1	13.0	10.0	11.3
11	---	---	---	11.8	10.5	11.2	11.3	10.0	10.8	12.0	10.0	10.8
12	---	---	---	13.6	11.4	12.5	11.5	11.0	11.2	12.2	9.7	10.5
13	---	---	---	14.4	12.5	13.2	11.5	11.1	11.4	10.0	9.1	9.5
14	---	---	---	14.5	12.6	13.5	11.4	10.9	11.1	9.7	8.8	9.1
15	---	---	---	15.7	13.2	14.4	11.5	11.1	11.2	10.7	8.8	9.6
16	14.8	12.6	13.4	16.0	13.5	14.6	11.5	11.3	11.3	11.3	8.8	9.8
17	16.1	12.1	14.0	14.9	12.2	13.7	11.9	11.6	11.7	11.9	8.9	10.3
18	---	---	---	12.3	10.5	11.3	12.1	11.6	11.8	10.3	8.9	9.6
19	---	---	---	10.7	9.8	10.2	12.2	11.7	12.0	11.8	8.7	10.1
20	---	---	---	13.1	11.6	12.6	12.0	11.2	11.8	11.4	8.7	9.9
21	17.0	13.2	---	12.4	11.6	12.1	11.5	10.8	11.4	9.5	8.4	8.9
22	13.7	11.2	12.5	12.7	11.3	11.9	11.0	10.4	10.8	10.7	8.3	9.4
23	14.3	10.5	12.1	13.5	12.8	13.2	11.2	10.4	10.7	11.1	8.3	9.4
24	14.1	10.4	12.0	13.7	13.3	13.5	11.6	10.7	11.0	10.4	7.7	9.0
25	14.1	10.6	12.0	13.6	13.2	13.4	11.5	10.5	10.9	11.7	7.3	9.4
26	14.1	10.6	12.2	13.6	13.4	13.5	10.9	10.2	10.5	12.2	7.4	9.8
27	---	---	---	13.8	13.6	13.7	11.0	10.0	10.4	13.1	7.8	10.5
28	---	---	---	13.8	13.5	13.6	11.1	9.9	10.4	13.6	8.5	11.0
29	---	---	---	13.5	13.0	13.3	10.3	9.6	9.9	13.9	8.5	11.2
30	---	---	---	13.0	12.7	12.9	10.4	9.7	10.1	12.9	8.3	10.3
31	---	---	---	13.0	11.5	12.7	---	---	---	12.5	8.2	10.1
MONTH	17.0	10.4	12.6	18.0	9.8	13.1	13.1	9.6	11.3	13.9	7.3	10.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	13.1	7.9	10.4	---	---	---	13.1	7.0	9.8	9.6	5.9	7.5
2	9.9	7.4	8.7	---	---	---	14.0	6.8	10.1	9.5	5.6	7.3
3	10.5	6.2	7.8	---	---	---	14.2	6.6	9.9	9.5	5.7	7.4
4	9.1	6.2	7.5	---	---	---	12.2	6.4	9.0	10.1	6.3	7.9
5	8.9	6.0	7.3	---	---	---	9.6	5.9	---	9.3	6.4	7.5
6	9.8	6.7	8.0	---	---	---	---	---	---	10.0	6.2	7.9
7	10.3	6.7	8.3	---	---	---	---	---	---	10.0	6.4	8.0
8	9.5	6.8	8.1	11.2	7.4	9.1	---	---	---	13.9	7.2	10.1
9	---	---	---	12.5	7.6	9.8	---	---	---	14.5	8.3	11.0
10	---	---	---	11.8	7.1	9.4	---	---	---	12.0	7.6	9.6
11	---	---	---	11.9	6.9	9.1	---	---	---	10.7	7.6	9.0
12	---	---	---	11.8	6.8	9.3	---	---	---	10.3	7.6	8.7
13	---	---	---	12.7	7.2	9.7	13.6	9.4	---	10.3	7.0	8.4
14	---	---	---	12.9	7.2	9.8	13.9	7.3	10.2	9.4	6.7	7.9
15	---	---	---	12.9	7.4	10.0	12.7	7.2	9.3	8.3	6.2	7.2
16	---	---	---	12.9	7.1	9.1	---	---	---	9.0	6.4	7.5
17	11.2	7.0	9.0	11.3	6.2	8.3	---	---	---	8.6	6.7	7.5
18	11.4	7.2	9.4	11.4	6.3	8.8	---	---	---	7.4	6.1	6.8
19	---	---	---	12.0	6.4	9.0	---	---	---	8.6	6.7	7.5
20	---	---	---	13.0	6.4	9.4	---	---	---	9.0	6.4	7.4
21	---	---	---	13.4	6.5	9.7	---	---	---	9.3	6.2	7.4
22	---	---	---	13.6	6.2	9.1	---	---	---	9.5	5.9	7.3
23	---	---	---	9.4	5.6	7.1	11.8	6.8	9.0	9.1	5.5	7.1
24	---	---	---	10.9	5.8	8.1	12.2	6.8	9.1	9.6	5.7	7.4
25	14.2	8.1	11.2	13.6	6.2	9.6	11.7	6.6	8.9	---	---	---
26	14.2	8.1	11.2	14.2	7.2	10.3	12.2	6.5	8.9	---	---	---
27	14.2	7.8	10.8	14.1	7.1	10.2	11.6	6.2	8.5	---	---	---
28	13.3	7.3	10.2	12.2	7.1	9.5	10.9	6.4	8.2	---	---	---
29	12.3	6.7	9.0	10.0	6.9	8.3	9.5	6.1	7.4	11.9	9.2	---
30	10.2	6.2	8.0	12.9	6.8	9.5	9.7	6.0	7.6	12.2	8.4	9.9
31	---	---	---	13.3	7.1	9.8	9.6	6.1	7.6	---	---	---
MONTH	14.2	6.0	9.1	14.2	5.6	9.3	14.2	5.9	8.9	14.5	5.5	8.1

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	10000	16	432	7620	4	82	20200	8	436
2	18900	92	4690	7260	3	59	17200	10	464
3	20900	82	4630	10900	37	1090	15100	8	326
4	25200	69	4690	16200	45	1970	13800	6	224
5	23000	49	3040	21500	22	1280	13700	4	148
6	31800	89	7640	17400	14	658	12800	4	138
7	32900	58	5150	14900	6	241	12900	4	139
8	28900	36	2810	13300	5	180	11700	4	126
9	22300	17	1020	12100	4	131	10600	4	114
10	24400	17	1120	11500	5	155	9210	3	75
11	22900	14	866	11700	6	190	8550	4	92
12	19200	10	518	12900	8	279	8700	3	70
13	17500	9	425	11900	5	161	8870	4	96
14	15500	9	377	11200	5	151	10500	4	113
15	13600	8	294	10600	4	114	10100	3	82
16	11900	7	225	9710	4	105	9510	3	77
17	11900	8	257	9020	3	73	8810	4	95
18	11300	7	214	8680	2	47	8240	6	133
19	11100	7	210	8530	3	69	8130	5	110
20	10300	7	195	8600	3	70	7960	4	86
21	9680	6	157	8290	4	90	7700	3	62
22	8310	5	112	8030	4	87	7580	3	61
23	7810	6	127	7800	3	63	8120	2	44
24	8420	8	182	7110	3	58	7920	3	64
25	9790	8	211	6930	3	56	9410	6	152
26	9880	7	187	8130	8	176	14300	24	927
27	10000	5	135	30300	96	7850	17000	31	1420
28	9020	4	97	48700	175	23000	15600	10	421
29	8160	5	110	35200	107	10200	13600	7	257
30	7860	5	106	25600	52	3590	12100	4	131
31	7770	4	84	---	---	---	10700	3	87
TOTAL	480200	---	40311	421610	---	52275	350610	---	6770
		JANUARY			FEBRUARY			MARCH	
1	9930	3	80	4510	2	24	3900	3	32
2	10100	2	55	4000	2	22	3460	2	19
3	8880	1	24	3900	3	32	4090	2	22
4	9030	1	24	4000	3	32	3370	1	9.1
5	8640	1	23	4800	3	39	3760	3	30
6	7970	4	86	4200	3	34	4310	4	47
7	6870	2	37	4400	4	48	3950	5	53
8	6160	1	17	4500	4	49	3860	5	52
9	6500	1	18	4400	4	48	4630	33	413
10	6520	1	18	4330	3	35	5340	29	418
11	6360	6	103	4270	2	23	7110	24	461
12	10900	32	942	3980	2	21	7490	19	384
13	11200	15	454	3970	1	11	6240	8	135
14	8880	12	288	3760	2	20	6230	7	118
15	8520	3	69	3830	2	21	5340	7	101
16	8600	2	46	3970	3	32	6330	9	154
17	8270	2	45	4000	2	22	5950	16	257
18	7580	3	61	3650	2	20	14100	148	5630
19	9160	4	99	3480	3	28	23200	226	14200
20	8540	3	69	3670	2	20	27500	158	11700
21	7400	2	40	3780	3	31	29500	223	17800
22	6770	2	37	4300	4	46	69800	550	104000
23	6420	2	35	4850	5	65	88700	317	75900
24	6520	2	35	4990	6	81	52000	125	17600
25	6240	2	34	5380	5	73	46800	62	7830
26	5580	2	30	4720	4	51	40600	43	4710
27	5630	1	15	4140	4	45	34100	30	2760
28	5260	1	14	3670	3	30	26500	23	1650
29	5390	1	15	3640	3	29	25700	21	1460
30	4950	2	27	---	---	---	29200	19	1500
31	4720	2	25	---	---	---	35700	27	2600
TOTAL	233490	---	2865	121090	---	1032	628760	---	272045.1

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	39400	26	2770	32900	42	3730	5070	6	82
2	37100	25	2500	27600	23	1710	5930	8	128
3	33500	22	1990	23500	14	888	5650	11	168
4	32700	23	2030	19900	11	591	7300	26	512
5	32400	22	1920	16800	9	408	7270	28	550
6	30200	17	1390	14800	7	280	6070	22	361
7	25600	14	968	14900	7	282	5390	18	262
8	21500	13	755	13600	7	257	5520	15	224
9	22700	28	1720	12400	7	234	5570	14	211
10	34900	46	4330	11300	6	183	5810	15	235
11	47800	62	8000	10600	5	143	5780	17	265
12	40600	30	3290	9930	5	134	5620	15	228
13	31900	20	1720	14800	61	2440	5560	11	165
14	28200	16	1220	14300	56	2160	5020	9	122
15	30600	18	1490	12000	14	454	4590	8	99
16	34800	25	2350	10900	6	177	4310	8	93
17	33000	30	2670	9730	5	131	4270	7	81
18	28300	21	1600	8810	7	167	4240	8	92
19	23900	11	710	8300	5	112	4320	9	105
20	20200	10	545	8180	6	133	4170	9	101
21	17600	12	570	8680	8	187	4080	9	99
22	16100	10	435	9440	11	280	4030	8	87
23	15300	8	330	8660	10	234	4000	8	86
24	13800	7	261	7780	7	147	4060	8	88
25	12800	6	207	7110	6	115	3900	7	74
26	11800	6	191	6550	7	124	3730	6	60
27	11300	5	153	5900	8	127	3650	8	79
28	13400	8	289	5530	6	90	3680	10	99
29	23100	25	1560	5160	6	84	3590	7	68
30	33800	45	4110	4840	8	105	4040	12	131
31	---	---	---	4620	6	75	---	---	---
TOTAL	798300	---	52074	369520	---	16182	146220	---	4955
		JULY			AUGUST			SEPTEMBER	
1	4550	22	270	3030	5	41	3050	7	58
2	5430	30	440	3230	7	61	3100	8	67
3	5710	28	432	3340	6	54	3040	9	74
4	4930	20	266	3660	5	49	2970	10	80
5	4570	15	185	4210	15	171	2930	8	63
6	4450	13	156	4470	27	326	2830	8	61
7	5030	23	312	4350	13	153	3040	9	74
8	4490	19	230	4070	9	99	2830	10	76
9	4570	16	197	3810	6	62	2970	9	72
10	4500	14	170	3630	6	59	2800	8	60
11	4200	12	136	3490	5	47	2740	7	52
12	4140	11	123	2950	5	40	2690	6	44
13	4310	10	116	2950	4	32	2660	4	29
14	3800	7	72	3130	11	93	2840	7	54
15	3710	7	70	3070	9	75	3220	10	87
16	3460	10	93	3050	7	58	3070	6	50
17	3840	9	93	3140	4	34	2870	4	31
18	3780	8	82	3080	4	33	3730	5	50
19	3710	7	70	2910	3	24	3660	4	40
20	3500	6	57	2730	4	29	3480	5	47
21	3200	6	52	2820	5	38	3280	4	35
22	3100	7	59	2500	2	13	3150	5	43
23	3260	10	88	2560	3	21	2800	4	30
24	4350	11	129	2650	5	36	2720	3	22
25	3930	9	95	2640	7	50	3070	4	33
26	3660	7	69	2650	5	36	2840	5	38
27	3380	7	64	2770	4	30	2770	3	22
28	3220	6	52	3080	4	33	2850	2	15
29	3150	6	51	3140	4	34	2800	2	15
30	3130	7	59	3000	6	49	2640	3	21
31	3200	6	52	3020	7	57	---	---	---
TOTAL	124260	---	4340	99130	---	1937	89440	---	1443
YEAR	3862630		456229.1						

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE TIME	NOV 29,79 1330	MAR 26,80 1200	MAY 15,80 1230	JUN 18,80 1200
TOTAL CELLS/ML	9800	1000	2800	70000
DIVERSITY: DIVISION	1.4	0.9	1.4	1.5
.CLASS	1.4	0.9	1.4	1.5
..ORDER	1.8	1.7	2.3	1.7
...FAMILY	2.9	3.2	2.7	2.1
....GENUS	3.3	3.6	2.9	2.6

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...COELASTRACEAE								
....COELASTRUM	--	-	--	-	--	-	--	-
...HYDRODICTYACEAE								
....PEDIASTRUM	--	-	--	-	--	-	--	-
...MICRACTINIACEAE								
....GOLENKINIA	--	-	--	-	*	0	*	0
....MICRACTINIUM	--	-	--	-	90	3	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	580	6	55	5	90	3	*	0
....CHLORELLA	58	1	--	-	--	-	1300	2
....CHODATELLA	--	-	--	-	*	0	970	1
....DICTYOSPHAERIUM	460	5	--	-	--	-	1300	2
....KIRCHNERIELLA	120	1	8	1	--	-	--	-
....OOCYSTIS	--	-	--	-	--	-	1300	2
....POLYEDRIOPSIS	--	-	--	-	--	-	*	0
....SELENASTRUM	--	-	--	-	*	0	3200	5
....TETRAEDRON	--	-	--	-	--	-	--	-
...SCENEDESMACEAE								
....CRUCIGENIA	--	-	--	-	--	-	--	-
....SCENEDESMUS	230	2	16	2	100	4	17000°	24
....TETRASTRUM	230	2	--	-	--	-	2600	4
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	8	1	51	2	1600	2
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	520	5	250°	25	730°	27	11000°	15
....MELOSIRA	--	-	39	4	51	2	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	2300°	23	39	4	26	1	--	-
....COCCONEIS	58	1	24	2	*	0	--	-
...CYMBELLACEAE								
....CYMBELLA	810	8	79	8	26	1	--	-
...DIATOMACEAE								
....DIATOMA	--	-	63	6	26	1	--	-
...EUNOTIACEAE								
....EUNOTIA	120	1	8	1	--	-	--	-
...FRAGILARIACEAE								
....ASTERIONELLA	170	2	24	2	--	-	--	-
....FRAGILARIA	--	-	16	2	--	-	--	-
....SYNEDRA	230	2	120	12	*	0	--	-
...GOMPHONEMATACEAE								
....GOMPHONEMA	410	4	--	-	--	-	--	-
...MERIDIONACEAE								
....MERIDION	--	-	8	1	--	-	--	-
...NAVICULACEAE								
....NAVICULA	580	6	86	8	100	4	--	-
...NITZSCHIACEAE								
....NITZSCHIA	58	1	63	6	77	3	970	1
...SURIRELLACEAE								
....SURIRELLA	--	-	8	1	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....ANACYSTIS	120	1	--	-	820°	30	27000°	39
....COCCOCHLORIS	--	-	--	-	--	-	640	1
..HORMOGONALES								
...OSCILLATORIACEAE								
....OSCILLATORIA	2800°	28	100	10	490°	18	--	-
PYRRHOPHYTA (FIRE ALGAE)								
.DINOPHYCEAE								
..PERIDINIALES								
...PERIDINIACEAE								
....PERIDINIUM	--	-	8	1	--	-	--	-

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

NOTE: ° - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

DATE	JUL 24,80		AUG 12,80		SEP 16,80	
TIME	1130		1100		1305	
TOTAL CELLS/ML	82000		60000		8100	
DIVERSITY: DIVISION	1.1		0.9		1.2	
.CLASS	1.1		0.9		1.2	
..ORDER	1.2		1.0		1.2	
...FAMILY	1.7		2.0		2.1	
....GENUS	1.8		2.6		2.2	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..CHLOROCOCCALES						
...COELASTRACEAE						
....COELASTRUM	--	-	6100	10	--	-
...HYDRODICTYACEAE						
....PEDIASTRUM	--	-	--	-	670	8
...MICRACTINIACEAE						
....GOLENKINIA	860	1	--	-	--	-
....MICRACTINIUM	--	-	--	-	--	-
...OOCYSTACEAE						
....ANKISTRODESMUS	4000	5	900	1	170	2
....CHLORELLA	--	-	--	-	--	-
....CHODATELLA	--	-	--	-	--	-
....DICTYOSPHAERIUM	--	-	13000°	21	--	-
....KIRCHNERIELLA	--	-	--	-	--	-
....OOCYSTIS	--	-	--	-	--	-
....POLYEDRIOPSIS	--	-	--	-	--	-
....SELENASTRUM	5700	7	4300	7	1200°	15
....TETRAEDRON	--	-	360	1	--	-
...SCENEDESMACEAE						
....CRUCIGENIA	--	-	1400	2	--	-
....SCENEDESMUS	34000°	42	17000°	27	3000°	38
....TETRASTRUM	--	-	720	1	--	-
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	860	1	360	1	--	-
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	1100	1	360	1	--	-
....MELOSIRA	--	-	--	-	--	-
..PENNALES						
...ACHNANTHACEAE						
....ACHNANTHES	--	-	--	-	*	0
....COCCONEIS	--	-	--	-	--	-
...CYMBELLACEAE						
....CYMBELLA	--	-	--	-	--	-
...DIATOMACEAE						
....DIATOMA	--	-	--	-	--	-
...EUNOTIACEAE						
....EUNOTIA	--	-	--	-	--	-
...FRAGILARIACEAE						
....ASTERIONELLA	--	-	--	-	--	-
....FRAGILARIA	--	-	--	-	--	-
....SYNEDRA	--	-	--	-	--	-
...GOMPHONEMATACEAE						
....GOMPHONEMA	--	-	--	-	--	-
...MERIDIONACEAE						
....MERIDION	--	-	--	-	--	-
...NAVICULACEAE						
....NAVICULA	--	-	--	-	67	1
...NITZSCHIACEAE						
....NITZSCHIA	570	1	*	0	300	4
...SURIRELLACEAE						
....SURIRELLA	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)						
.CYANOPHYCEAE						
..CHROOCOCCALES						
...CHROOCOCCACEAE						
....ANACYSTIS	34000°	42	16000°	27	2600°	32
....COCCOCHLORIS	--	-	--	-	--	-
..HORMOGONALES						
...OSCILLATORIACEAE						
....OSCILLATORIA	--	-	--	-	--	-

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

PYRRHOPHYTA (FIRE ALGAE)						
.DINOPHYCEAE						
..PERIDINIALES						
...PERIDINIACEAE						
....PERIDINIUM	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01464600 DELAWARE RIVER AT BRISTOL, PA-BURLINGTON, NJ BRIDGE

LOCATION.--Lat 40°04'55", long 74°51'58", Bucks County, Hydrologic Unit 02040201, at center of river 1,300 ft (396 m) upstream from bridge on a line from the Pennsylvania bank through channel station -79.2 to Lehigh range light on New Jersey bank.

DRAINAGE AREA.--7,163 mi^2 (18,508 km^2).

PERIOD OF RECORD.--August 1949 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1967 to September 1975, July 1978 to current year.
pH: October 1967 to September 1975, July 1978 to current year.
WATER TEMPERATURES: October 1954 to September 1975, July 1978 to current year.
DISSOLVED OXYGEN: October 1961 to September 1975, July 1978 to current year.

REMARKS.--Further information on this station is given in U.S. Geological Survey Water-Supply Paper 1809-0.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 397 micromhos Nov. 1, 1970; minimum, 54 micromhos June 5, 1968.
pH: Maximum, 9.2 Sept. 28, 29, 1978; minimum, 3.9 Sept. 2, 1978.
WATER TEMPERATURES: Maximum, 31.0°C July 9, 1966; minimum, freezing point on many days during winter months.
DISSOLVED OXYGEN: Maximum, 16.0 mg/L Jan. 12, 1974; minimum, 0.0 on several days during 1963, 1965, and 1967.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	BICARBONATE (MG/L AS HCO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)
MAY 21...	1050	176	7.2	57	16	14	5.4	10	.6	50	41	5.0
SEP 04...	1440	233	6.8	81	33	20	7.6	15	.8	59	48	15

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE DISSOL. (MG/L AS P)	PHOSPHORUS, ORTHOPHOSPHATE DISSOL. (MG/L AS PO4)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)
MAY 21...	24	11	3.2	110	99	.15	1.5	.020	.06	0	30	<1
SEP 04...	30	19	.1	147	130	.20	1.4	.050	.15	--	30	0

DATE	CADMIUM DISSOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, DISSOLVED (UG/L AS CO)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, DISSOLVED (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, DISSOLVED (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	LITHIUM DISSOLVED (UG/L AS LI)
MAY 21...	3	<10	<10	<3	10	<10	<10	63	5600	--	10	<4
SEP 04...	1	--	--	0	--	0	--	8	--	0	--	2

01464600 DELAWARE RIVER AT BRISTOL, PA-BURLINGTON, NJ BRIDGE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY												
21...	27	270	.00	18	0	63	<6.0	18	110	4.6	32	.0
SEP												
04...	11	--	--	0	--	90	.0	0	--	2.8	--	--

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY											
21...	.0	0	23	14	28	.0	.0	.0	.0	.0	.0
SEP											
04...	--	--	--	--	--	--	--	--	--	--	--

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY											
21...	.0	.0	.0	.0	.0	.0	.0	.0	.00	.0	0
SEP											
04...	--	--	--	--	--	--	--	--	--	--	--

DATE	BENZENE TOTAL (UG/L)	CARBONTETRACHLORIDE TOTAL (UG/L)	CHLORODIBROMOMETHANE TOTAL (UG/L)	CHLOROFORM TOTAL (UG/L)	DICHLOROBROMOMETHANE TOTAL (UG/L)	1,1-DICHLOROETHANE TOTAL (UG/L)	1,2-DICHLOROETHANE TOTAL (UG/L)	1,2-DICHLOROPROPANE TOTAL (UG/L)	TETRACHLOROETHYLENE TOTAL (UG/L)	1,1,1-TRICHLOROETHANE TOTAL (UG/L)	TRICHLOROETHYLENE TOTAL (UG/L)
MAY											
21...	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	5.0
SEP											
04...	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

01464600 DELAWARE RIVER AT BRISTOL, PA-BURLINGTON, NJ BRIDGE--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	166	156	162	---	---	---	112	98	104	156	147	149
2	168	162	165	---	---	---	121	107	113	156	150	152
3	166	151	157	---	---	---	128	116	120	162	154	157
4	158	126	140	---	---	---	136	121	125	166	159	161
5	131	118	125	---	---	---	142	130	133	165	162	163
6	126	109	117	---	---	---	151	136	139	169	163	165
7	117	103	110	---	---	---	150	140	142	175	167	169
8	108	95	101	---	---	---	151	144	146	177	172	174
9	101	95	97	---	---	---	157	148	151	183	176	178
10	112	99	104	---	---	---	163	153	156	188	179	182
11	127	106	119	---	---	---	166	158	161	197	184	189
12	134	126	129	---	---	---	170	162	165	208	190	201
13	142	131	135	---	---	---	174	166	170	208	190	202
14	148	136	139	---	---	---	185	172	176	205	192	199
15	149	142	145	172	166	167	186	177	180	204	192	199
16	152	146	148	177	168	170	187	176	179	202	193	199
17	156	149	152	182	172	175	183	178	179	200	193	197
18	161	153	156	182	175	177	183	175	179	201	192	196
19	160	157	158	185	177	178	182	174	178	199	193	195
20	---	---	---	188	180	182	181	175	178	198	192	195
21	---	---	---	189	183	185	185	178	181	199	194	196
22	---	---	---	191	185	187	190	182	186	204	195	198
23	---	---	---	192	186	188	194	188	191	201	196	198
24	---	---	---	193	186	189	201	192	194	203	197	199
25	---	---	---	195	189	191	196	195	195	211	199	203
26	---	---	---	196	192	193	---	---	---	212	205	208
27	---	---	---	198	189	192	197	191	193	217	209	212
28	---	---	---	189	117	161	192	158	178	222	212	216
29	---	---	---	120	94	100	170	143	153	224	217	218
30	---	---	---	105	93	97	151	143	145	224	218	220
31	---	---	---	---	---	---	155	144	146	228	220	223
MONTH	168	95	135	198	93	171	201	98	161	228	147	191

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	230	224	226	263	254	257	129	119	122	166	125	142
2	233	227	229	261	252	257	131	123	126	130	122	125
3	235	229	231	262	251	256	140	127	132	130	124	126
4	237	231	233	260	252	256	141	129	133	149	126	130
5	241	234	236	262	254	257	138	130	133	143	134	136
6	245	236	240	265	257	260	143	131	137	143	136	139
7	256	241	247	273	261	265	136	129	131	153	143	146
8	272	249	260	274	262	268	134	129	130	---	---	---
9	284	260	272	---	---	---	139	130	133	---	---	---
10	282	270	276	---	---	---	146	136	141	---	---	---
11	282	268	274	---	---	---	145	122	135	---	---	---
12	275	260	269	271	252	260	123	108	113	---	---	---
13	273	259	266	262	249	255	119	108	111	---	---	---
14	271	257	263	261	223	247	127	112	118	---	---	---
15	269	257	262	247	207	225	136	121	125	---	---	---
16	265	256	260	232	205	216	138	127	131	---	---	---
17	263	254	259	220	210	216	140	122	129	---	---	---
18	268	255	259	---	---	---	130	120	124	---	---	---
19	266	255	259	---	---	---	131	122	124	---	---	---
20	265	255	259	---	---	---	137	124	129	---	---	---
21	266	256	259	---	---	---	140	129	134	---	---	---
22	266	257	260	---	---	---	150	138	142	168	158	163
23	263	256	259	---	---	---	153	145	147	173	165	169
24	267	255	261	---	---	---	159	149	153	176	170	172
25	268	257	261	---	---	---	162	156	158	179	171	174
26	265	254	259	---	---	---	171	160	163	178	172	174
27	267	255	260	120	114	117	173	164	169	182	173	175
28	262	253	258	125	115	119	175	171	172	184	175	177
29	260	255	257	131	120	124	182	174	177	186	177	179
30	---	---	---	140	128	134	182	152	175	190	178	182
31	---	---	---	137	123	132	---	---	---	192	182	187
MONTH	284	224	256	274	114	217	182	108	138	192	122	159

01464600 DELAWARE RIVER AT BRISTOL, PA-BURLINGTON, NJ BRIDGE--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	201	187	192	234	232	---	225	216	219	236	228	231
2	203	191	197	---	---	---	221	217	219	237	229	231
3	210	197	203	---	---	---	223	217	219	235	229	231
4	218	201	211	---	---	---	222	217	220	237	228	231
5	225	211	220	---	---	---	225	218	221	237	224	231
6	225	218	222	---	---	---	224	216	219	236	222	228
7	226	215	221	230	208	221	229	214	219	231	215	224
8	220	212	217	229	195	213	234	213	219	228	214	222
9	218	206	212	222	190	203	222	209	217	226	212	221
10	214	202	208	214	190	198	221	207	214	229	210	218
11	211	203	208	206	195	198	221	205	212	223	211	217
12	211	208	209	202	197	199	216	201	208	220	212	216
13	211	206	208	205	199	201	210	197	205	218	211	214
14	214	206	208	206	201	203	208	196	203	222	213	215
15	211	206	208	211	201	204	205	193	200	219	213	215
16	210	206	208	207	201	203	202	193	198	220	215	216
17	209	207	208	207	201	203	201	194	197	222	216	218
18	216	208	210	207	202	204	201	196	198	223	216	219
19	215	209	211	207	204	205	207	198	200	223	218	220
20	216	211	213	212	206	208	209	200	204	224	219	221
21	221	214	216	215	209	211	211	201	206	227	217	221
22	227	217	220	218	210	214	218	202	210	225	213	219
23	226	217	222	219	212	216	224	206	213	225	212	219
24	227	220	224	222	215	218	223	209	216	223	211	219
25	231	223	226	223	216	218	226	211	218	224	209	217
26	234	224	227	222	216	218	222	214	219	222	209	215
27	237	226	229	223	216	219	226	217	221	218	207	213
28	234	227	231	222	217	220	232	220	223	219	208	213
29	235	229	232	225	218	220	230	221	225	216	209	213
30	235	230	232	221	214	219	233	224	227	217	210	214
31	---	---	---	224	217	219	235	225	229	---	---	---
MONTH	237	187	215	234	190	210	235	193	213	237	207	220

PH (UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	6.8	6.7	6.7	---	---	---	6.9	6.7	6.8	7.3	7.2	7.3
2	6.8	6.7	6.7	---	---	---	7.0	6.8	6.9	7.4	7.3	7.3
3	6.8	6.7	6.8	---	---	---	7.0	6.9	6.9	7.4	7.3	7.3
4	6.8	6.7	6.7	---	---	---	7.1	6.9	7.0	7.4	7.3	7.4
5	6.9	6.7	6.8	---	---	---	7.1	7.0	7.1	7.4	7.4	7.4
6	6.9	6.8	6.9	---	---	---	7.1	7.1	7.1	7.5	7.4	7.4
7	6.9	6.8	6.9	---	---	---	7.1	7.1	7.1	7.5	7.4	7.4
8	6.9	6.9	6.9	---	---	---	7.2	7.1	7.1	7.5	7.4	7.5
9	6.9	6.9	6.9	---	---	---	7.1	7.1	7.1	7.5	7.4	7.4
10	6.9	6.8	6.9	---	---	---	7.1	7.1	7.1	7.4	7.4	7.4
11	6.9	6.7	6.8	---	---	---	7.2	7.1	7.1	7.5	7.3	7.4
12	6.9	6.7	6.8	---	---	---	7.2	7.1	7.1	7.6	7.4	7.4
13	6.9	6.7	6.9	---	---	---	7.1	7.1	7.1	7.5	7.3	7.4
14	6.9	6.9	6.9	---	---	---	7.4	7.1	7.2	7.4	7.3	7.4
15	7.0	6.9	6.9	7.0	7.0	7.0	7.2	7.1	7.1	7.4	7.3	7.4
16	7.0	6.9	6.9	7.0	6.9	7.0	7.1	7.1	7.1	7.4	7.3	7.3
17	6.9	6.9	6.9	7.1	6.9	7.0	7.2	7.1	7.2	7.4	7.3	7.3
18	6.9	6.9	6.9	7.1	7.0	7.0	7.2	7.2	7.2	7.4	7.3	7.3
19	6.9	6.9	6.9	7.1	7.0	7.0	7.2	7.2	7.2	7.4	7.3	7.3
20	---	---	---	7.1	7.0	7.1	7.3	7.2	7.2	7.4	7.3	7.4
21	---	---	---	7.1	7.0	7.1	7.3	7.2	7.2	7.4	7.3	7.3
22	---	---	---	7.1	7.1	7.1	7.3	7.2	7.3	7.3	7.3	7.3
23	---	---	---	7.1	7.0	7.1	7.3	7.3	7.3	7.4	7.3	7.3
24	---	---	---	7.1	7.0	7.0	7.3	7.3	7.3	7.4	7.3	7.4
25	---	---	---	7.1	6.9	7.0	7.3	7.2	7.3	7.5	7.4	7.4
26	---	---	---	7.1	7.0	7.0	---	---	---	7.5	7.4	7.4
27	---	---	---	7.2	7.0	7.1	7.2	7.2	7.2	7.6	7.4	7.5
28	---	---	---	7.1	6.8	6.9	7.2	7.2	7.2	7.5	7.4	7.5
29	---	---	---	6.8	6.6	6.7	7.2	7.1	7.1	7.5	7.4	7.5
30	---	---	---	6.8	6.7	6.7	7.1	7.1	7.1	7.5	7.5	7.5
31	---	---	---	---	---	---	7.3	7.1	7.2	7.6	7.5	7.5
MONTH	7.0	6.7	6.9	7.2	6.6	7.0	7.4	6.7	7.1	7.6	7.2	7.4

01464600 DELAWARE RIVER AT BRISTOL, PA-BURLINGTON, NJ BRIDGE--Continued

PH (UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	7.7	7.5	7.6	7.5	7.4	7.5	---	---	---	6.8	6.7	6.8
2	7.7	7.6	7.6	7.5	7.4	7.5	---	---	---	6.7	6.6	6.6
3	7.6	7.6	7.6	7.5	7.5	7.5	---	---	---	6.7	6.6	6.7
4	7.6	7.6	7.6	7.5	7.4	7.5	---	---	---	6.7	6.6	6.6
5	7.6	7.5	7.6	7.5	7.5	7.5	---	---	---	6.7	6.6	6.6
6	7.6	7.5	7.5	7.5	7.4	7.5	7.1	6.9	---	6.6	6.6	6.6
7	7.6	7.5	7.6	7.5	7.4	7.5	7.0	6.9	6.9	6.6	6.5	6.5
8	7.7	7.6	7.6	7.5	7.5	7.5	6.9	6.9	6.9	---	---	---
9	7.6	7.6	7.6	---	---	---	6.9	6.9	6.9	---	---	---
10	7.7	7.5	7.6	---	---	---	6.9	6.6	6.8	---	---	---
11	7.6	7.6	7.6	---	---	---	6.8	6.6	6.7	---	---	---
12	7.6	7.6	7.6	7.5	7.4	7.4	6.7	6.6	6.7	---	---	---
13	7.6	7.6	7.6	7.4	7.3	7.4	6.7	6.6	6.7	---	---	---
14	7.6	7.5	7.6	7.5	7.4	7.4	6.8	6.6	6.7	---	---	---
15	7.6	7.5	7.5	7.4	7.3	7.4	6.8	6.7	6.8	---	---	---
16	7.5	7.5	7.5	7.5	7.3	7.4	6.8	6.7	6.8	---	---	---
17	7.5	7.4	7.5	7.6	7.3	7.4	6.8	6.7	6.8	---	---	---
18	7.5	7.4	7.5	---	---	---	6.8	6.7	6.8	---	---	---
19	7.5	7.4	7.5	---	---	---	6.9	6.8	6.8	---	---	---
20	7.5	7.4	7.5	---	---	---	6.9	6.8	6.8	---	---	---
21	7.5	7.4	7.5	---	---	---	6.9	6.8	6.8	---	---	---
22	7.5	7.4	7.4	---	---	---	6.8	6.8	6.8	6.8	6.7	6.8
23	7.5	7.4	7.4	---	---	---	6.8	6.7	6.8	6.8	6.7	6.8
24	7.5	7.4	7.4	---	---	---	6.7	6.6	6.7	6.8	6.7	6.8
25	7.5	7.4	7.4	---	---	---	6.7	6.6	6.7	6.8	6.7	6.7
26	7.4	7.3	7.4	---	---	---	6.7	6.6	6.7	6.8	6.7	6.7
27	7.4	7.4	7.4	---	---	---	6.7	6.6	6.7	6.8	6.7	6.8
28	7.4	7.4	7.4	---	---	---	6.8	6.7	6.7	6.8	6.7	6.8
29	7.5	7.4	7.4	---	---	---	6.8	6.7	6.8	6.9	6.7	6.8
30	---	---	---	---	---	---	6.9	6.8	6.8	6.9	6.8	6.8
31	---	---	---	---	---	---	---	---	---	6.9	6.8	6.8
MONTH	7.7	7.3	7.5	7.6	7.3	7.5	7.1	6.6	6.8	6.9	6.5	6.7

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	7.0	6.8	6.9	6.8	6.7	---	7.0	6.8	6.9	6.7	6.7	6.7
2	7.0	6.8	6.9	---	---	---	7.0	6.9	6.9	6.8	6.6	6.7
3	7.1	6.8	6.9	---	---	---	7.0	6.8	6.9	6.9	6.7	6.8
4	7.3	6.9	7.0	---	---	---	7.0	6.9	6.9	6.8	6.7	6.7
5	7.1	6.9	7.0	---	---	---	6.9	6.8	6.9	6.8	6.7	6.7
6	7.0	6.9	6.9	---	---	---	7.0	6.8	6.9	6.8	6.6	6.7
7	7.0	6.8	6.9	7.2	7.0	7.1	6.9	6.8	6.8	6.8	6.6	6.8
8	7.0	6.8	6.9	7.1	6.8	7.0	7.0	6.8	6.9	6.8	6.7	6.8
9	6.9	6.7	6.8	7.2	6.8	7.0	7.0	6.8	6.9	6.8	6.7	6.8
10	6.8	6.7	6.8	7.0	6.9	6.9	6.9	6.8	6.8	6.8	6.6	6.7
11	7.0	6.7	6.8	7.1	6.9	6.9	6.9	6.8	6.8	6.8	6.7	6.8
12	7.1	6.8	6.9	7.2	6.9	7.0	6.9	6.8	6.8	6.8	6.7	6.3
13	7.0	6.8	6.9	7.2	6.9	7.0	6.9	6.7	6.8	6.8	6.7	6.8
14	7.1	6.8	6.9	7.2	6.9	7.0	6.9	6.8	6.8	6.8	6.7	6.8
15	7.1	6.8	6.9	7.1	6.9	7.0	6.9	6.7	6.8	6.9	6.8	6.8
16	7.0	6.8	6.9	7.2	7.0	7.1	7.0	6.7	6.8	6.9	6.8	6.8
17	7.0	6.8	6.9	7.1	7.0	7.0	7.0	6.7	6.8	6.8	6.8	6.8
18	6.9	6.9	6.9	7.1	6.9	7.0	6.9	6.8	6.8	6.8	6.8	6.8
19	7.0	6.8	6.9	7.0	6.9	6.9	6.8	6.7	6.8	6.8	6.7	6.8
20	7.0	6.8	6.9	7.0	6.9	6.9	6.9	6.7	6.8	6.8	6.7	6.7
21	7.1	6.9	7.0	7.1	6.9	6.9	6.9	6.7	6.8	6.7	6.7	6.7
22	7.0	6.9	6.9	7.1	6.9	6.9	6.9	6.8	6.8	6.7	6.7	6.7
23	7.1	6.9	6.9	6.9	6.8	6.9	6.9	6.7	6.8	6.7	6.7	6.7
24	7.0	6.9	6.9	7.0	6.8	6.9	6.9	6.7	6.8	6.8	6.7	6.7
25	6.9	6.9	6.9	7.0	6.8	6.9	6.9	6.7	6.8	6.8	6.7	6.7
26	6.9	6.8	6.9	7.0	6.8	6.9	6.9	6.7	6.8	6.8	6.7	6.7
27	6.9	6.8	6.8	7.0	6.8	6.9	6.8	6.7	6.8	6.8	6.7	6.8
28	6.8	6.8	6.8	7.0	6.9	6.9	6.7	6.7	6.7	6.8	6.7	6.8
29	6.8	6.7	6.8	7.0	6.9	6.9	6.7	6.6	6.7	6.9	6.7	6.8
30	6.8	6.7	6.7	7.0	6.9	6.9	6.7	6.6	6.7	6.8	6.7	6.8
31	---	---	---	7.1	6.8	6.9	6.7	6.6	6.7	---	---	---
MONTH	7.3	6.7	6.9	7.2	6.7	7.0	7.0	6.6	6.8	6.9	6.6	6.8

01464600 DELAWARE RIVER AT BRISTOL, PA-BURLINGTON, NJ BRIDGE--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	19.5	19.0	19.0	---	---	---	9.5	7.5	8.5	5.5	5.0	5.0
2	19.5	19.0	19.5	---	---	---	8.0	6.5	7.0	5.0	5.0	5.0
3	19.5	18.5	19.0	---	---	---	7.0	5.5	6.5	5.0	4.5	5.0
4	19.0	18.0	18.5	---	---	---	6.0	5.0	5.5	5.0	4.0	4.5
5	18.5	18.0	18.5	---	---	---	6.0	5.0	5.5	4.0	3.5	4.0
6	18.0	16.5	17.5	---	---	---	6.0	5.0	5.5	4.0	3.0	3.5
7	17.0	15.5	16.5	---	---	---	6.5	5.0	5.5	3.5	3.0	3.5
8	15.5	14.5	15.5	---	---	---	6.0	5.0	5.5	3.5	3.0	3.0
9	15.0	14.5	14.5	---	---	---	6.0	5.5	6.0	3.0	3.0	3.0
10	14.5	13.5	14.0	---	---	---	6.5	5.5	6.0	3.0	2.5	3.0
11	13.5	12.0	13.0	---	---	---	6.5	5.5	6.0	3.5	2.5	3.0
12	12.5	11.5	12.0	---	---	---	7.0	6.0	6.5	4.0	3.5	4.0
13	12.0	11.5	12.0	---	---	---	7.0	6.5	6.5	4.5	3.5	4.0
14	11.5	11.5	11.5	---	---	---	7.5	6.5	6.5	4.5	4.0	4.5
15	12.0	11.5	11.5	11.0	10.5	10.5	7.0	6.5	7.0	5.0	4.0	4.5
16	12.0	11.5	11.5	11.0	9.5	10.5	7.0	6.5	6.5	5.0	4.0	4.5
17	12.5	12.0	12.0	10.5	9.5	9.5	7.0	5.5	6.0	5.0	4.5	4.5
18	13.0	12.0	12.5	10.0	9.0	9.5	6.0	4.5	5.5	5.5	4.5	5.0
19	12.5	12.5	12.5	9.5	9.0	9.5	5.5	3.5	5.0	6.0	5.0	5.5
20	---	---	---	10.0	9.0	9.5	4.5	3.0	4.0	6.0	5.5	5.5
21	---	---	---	10.0	9.0	9.5	4.0	2.5	3.5	5.5	5.0	5.5
22	---	---	---	10.0	9.5	9.5	3.5	2.5	3.0	5.5	5.0	5.0
23	---	---	---	10.5	9.5	10.0	3.5	2.5	3.0	5.5	5.0	5.0
24	---	---	---	11.0	10.0	10.5	3.5	3.0	3.5	5.0	4.0	4.5
25	---	---	---	11.5	10.5	11.0	4.0	3.5	3.5	4.5	4.0	4.0
26	---	---	---	12.0	11.0	11.5	---	---	---	4.5	4.0	4.0
27	---	---	---	13.5	12.0	13.0	7.0	6.0	6.5	4.0	3.5	3.5
28	---	---	---	14.0	12.0	13.5	6.5	6.0	6.0	4.0	3.5	3.5
29	---	---	---	12.0	10.5	11.0	6.0	5.5	5.5	3.5	3.0	3.5
30	---	---	---	10.5	8.5	9.5	5.5	5.0	5.5	3.0	2.5	3.0
31	---	---	---	---	---	---	5.5	5.0	5.0	3.0	2.0	2.5
MONTH	19.5	11.5	15.0	14.0	8.5	10.5	9.5	2.5	5.5	6.0	2.0	4.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.5	2.0	2.5	5.0	4.5	4.5	7.5	6.5	7.5	12.5	11.5	12.0
2	2.0	1.5	2.0	4.5	4.0	4.0	8.0	7.0	7.5	13.5	12.0	12.5
3	2.0	1.5	1.5	4.0	3.5	3.5	8.5	7.5	8.0	15.0	13.0	14.0
4	1.5	1.5	1.5	4.0	3.5	4.0	9.0	8.0	8.5	16.0	14.5	15.5
5	1.5	1.0	1.5	4.0	3.5	4.0	10.0	8.5	9.0	17.0	16.0	16.5
6	1.5	1.0	1.5	4.5	3.5	4.0	10.0	9.0	9.5	17.5	16.5	17.0
7	2.0	1.0	1.5	4.5	4.0	4.0	10.5	9.5	10.0	18.0	17.5	17.5
8	2.0	1.0	1.5	4.5	4.0	4.0	11.0	10.0	10.5	---	---	---
9	2.5	1.5	2.0	---	---	---	11.5	11.0	11.0	---	---	---
10	2.5	1.5	2.0	---	---	---	13.0	11.5	12.0	---	---	---
11	2.5	2.0	2.5	---	---	---	13.0	12.0	12.5	---	---	---
12	2.5	2.0	2.5	9.0	7.0	8.0	12.5	11.5	12.0	---	---	---
13	2.5	2.0	2.5	8.5	7.5	8.0	12.5	11.5	12.0	---	---	---
14	2.5	2.0	2.5	7.5	6.5	7.0	12.5	12.0	12.5	---	---	---
15	3.0	2.5	2.5	7.0	5.5	6.0	12.5	12.0	12.5	---	---	---
16	3.0	2.5	3.0	6.5	5.0	6.0	12.5	11.0	12.0	---	---	---
17	3.0	2.5	2.5	6.0	5.0	5.5	11.0	10.0	10.5	---	---	---
18	3.5	2.0	2.5	---	---	---	11.0	10.0	10.5	---	---	---
19	3.5	2.5	3.0	---	---	---	11.5	10.0	10.5	---	---	---
20	3.5	3.0	3.5	---	---	---	12.0	11.0	11.5	---	---	---
21	4.0	3.0	4.0	---	---	---	13.0	11.5	12.5	---	---	---
22	4.0	4.0	4.0	---	---	---	14.0	12.5	13.5	19.5	18.5	19.0
23	4.5	4.0	4.0	---	---	---	14.5	13.5	14.0	20.0	19.0	19.5
24	5.5	4.5	4.5	---	---	---	15.0	14.0	14.5	20.5	19.5	20.0
25	6.0	4.5	5.0	---	---	---	15.5	14.5	15.0	21.5	20.0	20.5
26	6.5	5.0	6.0	---	---	---	15.5	15.0	15.5	22.0	21.0	21.0
27	6.0	5.0	5.5	6.0	5.5	6.0	15.5	15.0	15.5	22.0	21.0	21.5
28	6.0	5.0	5.5	6.5	6.0	6.0	15.5	14.0	15.0	22.0	21.0	21.5
29	5.5	5.0	5.5	7.5	6.5	7.0	14.5	13.0	14.0	22.0	21.5	22.0
30	---	---	---	8.5	7.5	8.0	13.5	12.0	12.5	22.0	21.5	22.0
31	---	---	---	8.5	7.5	8.0	---	---	---	22.0	21.5	22.0
MONTH	6.5	1.0	3.0	9.0	3.5	5.5	15.5	6.5	11.5	22.0	11.5	18.5

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	22.5	22.0	22.0	27.0	25.5	---	29.5	28.5	29.0	28.5	27.5	28.0
2	23.0	22.0	22.5	---	---	---	29.5	29.0	29.0	28.5	28.0	28.5
3	23.5	22.5	23.0	---	---	---	29.5	29.0	29.5	29.0	28.5	28.5
4	24.0	23.0	23.0	---	---	---	30.0	29.0	29.5	29.0	28.5	28.5
5	24.0	22.5	23.5	---	---	---	30.0	29.5	29.5	28.5	28.5	28.5
6	23.5	23.0	23.5	---	---	---	30.5	29.0	29.5	28.5	28.0	28.5
7	24.0	23.0	23.5	27.0	26.5	27.0	30.5	29.0	30.0	28.5	28.0	28.5
8	24.0	23.0	23.5	27.0	26.5	26.5	30.5	29.5	30.0	28.5	28.0	28.0
9	23.5	22.5	22.5	27.0	26.0	26.5	30.5	29.5	30.0	28.0	27.5	28.0
10	22.5	22.0	22.5	27.0	26.0	26.5	30.0	29.5	30.0	28.0	27.5	27.5
11	23.0	22.0	22.5	27.5	26.5	27.0	30.0	29.5	30.0	27.5	27.0	27.0
12	23.0	22.0	22.5	27.5	26.5	27.0	30.0	29.5	29.5	27.0	26.5	27.0
13	23.0	22.0	22.5	27.0	26.5	27.0	30.0	29.5	29.5	27.0	26.5	26.5
14	23.0	22.0	22.5	27.5	26.5	27.0	30.0	29.0	29.5	27.0	26.5	26.5
15	23.0	22.0	22.5	27.5	27.0	27.0	29.5	29.0	29.5	26.5	26.0	26.5
16	23.0	22.5	22.5	28.0	27.0	27.5	29.5	28.5	29.0	26.0	25.5	25.5
17	23.5	22.0	22.5	28.0	27.5	27.5	28.5	28.0	28.5	25.5	25.0	25.5
18	23.0	22.5	23.0	28.5	27.5	28.0	28.5	28.0	28.0	25.5	25.0	25.0
19	23.5	22.5	23.0	28.5	28.0	28.5	28.5	28.0	28.0	25.0	24.5	25.0
20	23.5	23.0	23.0	29.0	28.0	28.5	28.0	27.5	28.0	25.0	24.5	25.0
21	23.5	22.5	23.0	29.5	28.5	29.0	28.0	27.0	27.5	25.0	24.0	24.5
22	23.5	23.0	23.5	30.0	29.0	29.5	27.5	26.5	27.0	25.5	24.5	25.0
23	24.0	23.0	23.5	29.5	29.0	29.5	27.0	26.5	26.5	25.5	24.5	25.0
24	24.5	23.5	24.0	29.5	29.0	29.0	27.0	26.5	26.5	25.0	24.0	24.5
25	24.5	24.0	24.5	29.5	29.0	29.0	27.0	26.5	27.0	24.5	24.0	24.0
26	25.0	24.5	24.5	29.5	29.0	29.5	27.5	26.5	27.0	24.0	23.5	24.0
27	26.0	24.5	25.0	29.5	29.0	29.5	27.5	27.0	27.5	23.5	23.0	23.0
28	26.5	25.0	25.5	29.5	29.0	29.0	28.0	27.0	27.5	23.0	22.5	23.0
29	26.5	25.5	26.0	29.0	28.5	29.0	28.0	27.5	27.5	23.0	22.0	22.5
30	27.0	25.5	26.5	29.5	28.5	29.0	28.0	27.5	27.5	22.5	22.0	22.5
31	---	---	---	29.5	28.5	29.0	28.0	27.5	28.0	---	---	---
MONTH	27.0	22.0	23.5	30.0	25.5	28.0	30.5	26.5	28.5	29.0	22.0	26.0

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	5.5	5.2	5.4	---	---	---	12.1	11.2	11.6	13.0	12.8	12.9
2	5.6	5.0	5.2	---	---	---	12.7	11.7	12.2	13.1	12.8	12.9
3	5.9	5.0	5.5	---	---	---	13.0	12.4	12.7	13.2	12.9	13.0
4	6.2	5.6	5.9	---	---	---	13.4	12.6	12.9	13.2	12.9	13.1
5	6.4	5.8	6.0	---	---	---	13.4	13.0	13.2	13.4	13.1	13.2
6	6.8	6.1	6.5	---	---	---	13.3	13.0	13.1	13.4	13.1	13.3
7	7.1	5.6	6.7	---	---	---	13.3	13.0	13.1	13.6	13.2	13.4
8	7.4	6.9	7.2	---	---	---	13.1	12.9	13.0	13.8	13.5	13.6
9	7.7	7.2	7.4	---	---	---	12.9	12.6	12.8	13.8	13.4	13.6
10	7.7	7.5	7.6	---	---	---	12.6	12.4	12.5	13.8	13.5	13.6
11	8.3	7.5	7.9	---	---	---	12.5	12.3	12.4	13.7	13.4	13.6
12	8.7	8.2	8.5	---	---	---	12.7	12.3	12.5	14.0	13.4	13.6
13	8.8	8.4	8.6	---	---	---	12.7	12.5	12.6	13.8	13.2	13.6
14	8.8	8.6	8.7	---	---	---	12.6	12.4	12.5	13.5	12.8	13.0
15	8.8	8.5	8.7	10.6	10.4	10.5	12.4	12.0	12.2	13.1	12.7	12.8
16	8.8	8.6	8.7	10.9	10.4	10.6	12.2	11.9	12.0	13.3	12.7	13.0
17	8.7	8.3	8.5	11.2	10.4	10.8	12.7	11.9	12.3	13.2	12.9	13.0
18	8.4	8.2	8.3	11.4	10.9	11.0	12.8	12.4	12.6	13.0	12.8	12.9
19	8.3	8.2	8.2	11.6	10.9	11.2	13.0	12.5	12.7	13.1	12.8	12.9
20	---	---	---	11.8	11.1	11.4	13.4	12.7	12.9	13.1	12.8	12.9
21	---	---	---	11.7	11.3	11.4	13.6	12.9	13.2	12.8	12.6	12.7
22	---	---	---	11.6	11.3	11.4	13.8	13.2	13.4	12.6	12.4	12.5
23	---	---	---	11.5	11.1	11.3	14.1	13.4	13.7	12.7	12.3	12.5
24	---	---	---	11.3	10.9	11.0	14.1	13.6	13.8	12.9	12.5	12.7
25	---	---	---	11.0	10.7	10.8	14.0	13.7	13.8	12.8	12.6	12.7
26	---	---	---	10.9	10.5	10.6	---	---	---	12.9	12.6	12.7
27	---	---	---	10.8	9.9	10.5	12.4	12.2	12.3	13.2	12.6	12.7
28	---	---	---	10.3	9.2	9.6	12.5	12.1	12.3	13.3	12.6	12.9
29	---	---	---	10.7	10.1	10.4	12.9	12.3	12.6	13.5	12.7	13.0
30	---	---	---	11.4	10.5	11.0	13.0	12.5	12.8	13.7	12.9	13.4
31	---	---	---	---	---	---	13.0	12.7	12.8	13.6	13.2	13.4
MONTH	8.8	5.0	7.3	11.8	9.2	10.8	14.1	11.2	12.8	14.0	12.3	13.1

01464600 DELAWARE RIVER AT BRISTOL, PA-BURLINGTON, NJ BRIDGE--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	13.6	13.3	13.5	11.9	11.5	11.7	11.3	10.7	11.0	9.1	8.6	8.8
2	13.7	13.4	13.6	12.1	11.5	11.8	11.5	11.0	11.2	9.0	8.6	8.8
3	13.7	13.4	13.5	12.4	11.6	12.0	11.3	10.1	10.7	8.7	8.3	8.6
4	13.6	13.4	13.5	12.4	12.0	12.2	10.1	9.8	10.0	8.3	7.9	8.2
5	13.6	13.3	13.4	12.6	11.9	12.2	10.2	9.7	10.0	8.0	7.5	7.9
6	13.5	13.2	13.4	13.1	11.8	12.5	10.0	9.7	9.8	7.6	6.7	7.3
7	13.8	13.3	13.5	13.0	12.1	12.5	10.1	9.8	9.9	7.1	6.8	6.8
8	13.9	13.4	13.6	12.7	12.0	12.3	9.9	9.6	9.8	---	---	---
9	13.8	13.4	13.6	---	---	---	9.6	9.3	9.5	---	---	---
10	13.8	13.4	13.6	---	---	---	9.3	8.6	9.0	---	---	---
11	13.6	13.3	13.4	---	---	---	9.2	8.5	8.9	---	---	---
12	13.5	13.3	13.4	11.4	10.8	10.9	9.4	9.0	9.2	---	---	---
13	13.4	13.1	13.3	10.7	10.2	10.4	9.4	9.1	9.2	---	---	---
14	13.4	13.1	13.2	11.0	10.2	10.5	9.3	8.9	9.1	---	---	---
15	13.3	13.0	13.1	12.1	10.6	11.4	9.0	8.9	8.9	---	---	---
16	13.1	12.4	12.8	12.1	10.8	11.4	9.4	8.9	9.2	---	---	---
17	12.8	12.5	12.7	11.7	11.1	11.4	9.7	9.2	9.4	---	---	---
18	12.8	12.2	12.7	---	---	---	9.9	9.5	9.7	---	---	---
19	12.6	12.3	12.5	---	---	---	9.8	9.5	9.6	---	---	---
20	12.4	12.0	12.2	---	---	---	9.6	9.3	9.5	---	---	---
21	12.1	11.9	12.0	---	---	---	9.4	9.1	9.3	---	---	---
22	12.1	11.7	11.9	---	---	---	9.2	8.8	9.0	7.8	7.3	7.5
23	12.2	11.7	11.9	---	---	---	8.8	8.4	8.6	7.5	7.1	7.3
24	12.3	11.7	12.0	---	---	---	8.5	8.0	8.2	7.3	6.9	7.1
25	12.2	11.8	12.0	---	---	---	8.1	7.8	7.9	7.3	6.8	7.0
26	12.1	11.7	11.9	---	---	---	7.9	7.7	7.8	7.7	6.8	7.1
27	12.0	11.6	11.8	12.0	11.7	11.8	7.7	7.5	7.6	7.8	6.7	7.2
28	11.8	11.5	11.7	12.0	11.7	11.8	8.0	7.5	7.7	8.0	6.7	7.2
29	11.8	11.4	11.6	11.7	11.2	11.5	8.4	7.7	8.0	7.6	6.8	7.2
30	---	---	---	11.3	10.8	11.0	8.9	8.2	8.4	7.4	6.8	7.0
31	---	---	---	11.1	10.8	10.9	---	---	---	7.1	6.5	6.8
MONTH	13.9	11.4	12.8	13.1	10.2	11.6	11.5	7.5	9.2	9.1	6.5	7.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.6	6.3	6.8	4.6	3.9	---	6.5	4.7	5.3	5.4	3.7	4.4
2	7.7	6.3	6.8	---	---	---	6.3	4.8	5.3	5.6	3.8	4.7
3	8.0	6.1	6.6	---	---	---	6.5	4.7	5.3	6.6	3.9	5.2
4	8.2	6.0	6.7	---	---	---	6.1	4.9	5.3	5.9	4.0	5.1
5	7.5	5.6	6.5	---	---	---	5.7	4.8	5.2	5.5	3.5	4.5
6	6.9	5.5	6.2	---	---	---	5.9	4.5	5.2	5.6	2.8	4.5
7	7.5	5.6	6.2	7.9	6.5	7.2	5.6	4.3	4.9	6.6	3.9	5.2
8	7.5	5.5	6.3	7.4	5.5	6.5	5.8	4.2	4.9	6.5	4.3	5.4
9	7.0	5.5	6.3	8.0	5.8	6.8	6.0	4.3	5.0	6.1	4.4	5.4
10	6.7	5.5	6.1	7.5	6.0	6.8	5.7	4.3	4.9	6.4	4.5	5.5
11	7.3	5.4	6.2	7.7	6.1	6.8	5.4	4.3	4.8	5.7	4.5	5.2
12	8.1	5.6	6.5	8.2	6.2	7.0	6.3	4.2	5.1	6.1	3.4	4.7
13	7.7	6.0	6.8	8.0	6.4	7.1	6.3	4.7	5.4	6.4	5.0	5.7
14	8.5	6.5	7.4	8.3	6.5	7.2	6.5	5.0	5.6	6.4	5.1	5.7
15	8.7	6.9	7.6	7.5	6.5	7.0	6.5	4.7	5.6	6.5	5.1	5.7
16	8.0	6.7	7.3	7.4	6.5	6.8	6.7	4.4	5.5	5.9	4.7	5.3
17	8.2	6.5	7.2	6.9	6.0	6.3	7.3	4.7	5.9	5.4	4.4	5.0
18	7.8	6.6	7.1	7.1	5.6	6.0	6.4	5.4	5.9	5.4	4.4	4.9
19	7.3	6.1	6.8	6.3	5.3	5.7	5.9	4.9	5.3	5.0	3.9	4.4
20	7.1	5.8	6.4	6.3	5.0	5.6	6.3	4.4	5.3	4.2	3.6	3.9
21	7.8	5.9	6.7	6.4	4.8	5.6	6.8	4.9	5.7	4.1	3.3	3.6
22	7.3	6.0	6.7	6.5	4.6	5.4	6.2	5.1	5.6	3.7	3.2	3.4
23	7.5	6.0	6.6	5.4	4.4	4.9	6.7	4.8	5.7	4.0	3.0	3.5
24	7.4	6.0	6.5	6.3	3.7	4.8	7.4	4.7	6.0	4.1	3.3	3.7
25	6.8	5.8	6.2	6.1	4.2	5.1	7.1	5.2	6.1	4.0	3.4	3.7
26	6.6	5.7	6.0	6.1	4.5	5.3	6.9	4.7	5.8	5.1	3.3	4.0
27	6.8	5.3	5.9	6.2	4.6	5.4	6.3	5.0	5.7	5.2	3.7	4.3
28	6.4	5.2	5.6	6.3	5.0	5.5	5.5	4.4	5.1	5.3	3.9	4.4
29	5.6	4.7	5.1	6.0	5.1	5.5	4.8	3.8	4.4	5.9	4.1	4.6
30	5.7	4.1	4.8	6.2	4.9	5.3	4.4	3.5	4.0	5.7	4.2	4.8
31	---	---	---	6.3	4.7	5.2	5.1	3.5	4.1	---	---	---
MONTH	8.7	4.1	6.5	8.3	3.7	6.0	7.4	3.5	5.3	6.6	2.8	4.7

01465500 NESHAMINY CREEK NEAR LANGHORNE, PA

LOCATION.--Lat 40°10'26", long 74°57'26", Bucks County, Hydrologic Unit 02040201, on left bank at bridge on State Highway 213, 0.3 mi (0.5 km) downstream from Mill Creek, and 1.7 mi (2.7 km) west of Langhorne.

DRAINAGE AREA.--210 mi² (544 km²).

PERIOD OF RECORD.--October 1934 to current year.

REVISED RECORDS.--WSP 1332: 1949. WSP 1432: 1936-37.

GAGE.--Water-stage recorder. Datum of gage is 40.57 ft (12.366 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Several observations of water temperature were made during the year. Some regulation at low flow by mills above station. Flow regulated by upstream reservoirs on Little Neshaminy Creek, Robin Run, Pine Run, North Branch Neshaminy Creek, and Core Creek (combined flood control capacity, about 9,560 acre-ft (11.8 hm³). Occasional regulation by Springfield Lake, capacity, 650 mil gal (2.460 hm³), completed in 1934; no significant regulation except during period May 1934 to January 1944, when the lake was filling, and in September 1949, July 1954, July through October 1957, September, October 1961. Interceptor sewer installed along left bank in May, June 1966.

AVERAGE DISCHARGE.--46 years, 291 ft³/s (8.241 m³/s), 18.81 in/yr (478 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 49,300 ft³/s (1,400 m³/s) Aug. 19, 1955, gage height, 22.84 ft (6.962 m), from floodmarks, from rating curve extended above 4,700 ft³/s (133 m³/s) on basis of contracted-opening measurement at gage height 15.94 ft (4.859 m), and slope-area measurement of peak flow; minimum, 1.9 ft³/s (0.054 m³/s) Sept. 8, 1957; minimum gage height, 0.35 ft (0.107 m) Sept. 1, 2, 1963.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 23, 1933, reached a stage of 17.3 ft (5.27 m), from floodmark, discharge, 30,000 ft³/s (850 m³/s), from rating curve extended as explained above.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,600 ft³/s (102 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 1	1930	5,710	162	8.00	2.438	Mar. 31	1815	5,000	142	7.45	2.271
Oct. 10	1800	3,760	106	6.41	1.954	Apr. 1	2030	5,030	142	7.48	2.280
Mar. 21	2145	*5,950	169	*8.18	2.493						

Minimum discharge, 12 ft³/s (0.34 m³/s) Sept. 12, 13, gage height, 0.58 ft (0.177 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2270	168	272	191	170	103	3830	370	112	69	69	22
2	1650	163	251	199	182	109	2020	297	111	57	75	21
3	746	1120	231	209	168	120	927	261	110	50	59	18
4	585	672	221	224	159	113	1440	251	117	50	75	15
5	654	391	212	203	152	105	1030	221	109	63	334	14
6	1170	320	206	176	143	109	599	206	95	93	400	18
7	518	286	286	200	110	101	471	194	89	91	200	25
8	420	258	268	184	120	102	403	241	93	56	100	29
9	377	237	228	173	115	225	1670	251	89	47	70	18
10	2860	343	215	158	103	200	2290	197	106	49	55	14
11	1570	424	237	228	110	373	825	176	109	47	50	14
12	789	1010	262	1360	96	253	580	182	87	45	200	13
13	757	529	307	436	96	178	467	623	79	42	89	13
14	548	415	426	316	102	488	411	662	77	34	57	15
15	449	347	322	300	97	622	458	360	77	30	47	52
16	394	312	295	271	116	638	382	266	85	49	43	57
17	353	276	314	242	147	709	335	214	79	56	37	37
18	326	254	211	900	132	1360	301	195	73	83	37	195
19	300	237	166	300	112	574	272	222	67	52	34	77
20	279	228	169	250	98	387	258	198	65	39	33	50
21	262	218	168	200	100	2290	244	201	61	33	30	37
22	247	206	181	400	100	2220	231	349	59	61	30	33
23	238	197	208	300	448	833	215	243	57	120	29	30
24	249	191	273	260	234	579	209	190	57	90	29	25
25	244	185	534	240	172	2180	200	167	59	65	26	33
26	215	682	451	219	149	825	191	155	54	43	25	50
27	199	1050	283	203	127	568	200	134	56	33	22	83
28	199	454	238	200	114	468	420	117	50	29	21	43
29	232	366	215	191	102	832	652	109	49	500	21	30
30	207	309	204	171	---	1020	382	104	69	250	25	29
31	188	---	191	181	---	2440	---	105	---	98	26	---
TOTAL	19495	11848	8045	9085	4074	21124	21913	7461	2400	2424	2348	1110
MEAN	629	395	260	293	140	681	730	241	80.0	78.2	75.7	37.0
MAX	2860	1120	534	1360	448	2440	3830	662	117	500	400	195
MIN	188	163	166	158	96	101	191	104	49	29	21	13
CFSM	3.00	1.88	1.24	1.40	.67	3.24	3.48	1.15	.38	.37	.36	.18
IN.	3.45	2.10	1.43	1.61	.72	3.74	3.88	1.32	.43	.43	.42	.20

CAL YR 1979	TOTAL	205684	MEAN 564	MAX 8720	MIN 69	CFSM 2.69	IN 36.44
WTR YR 1980	TOTAL	111327	MEAN 304	MAX 3830	MIN 13	CFSM 1.45	IN 19.72

01465770 POQUESSING CREEK AT TREVOSE ROAD, PHILADELPHIA, PA

LOCATION.--Lat 40°07'55", long 74°59'40", Bucks County, Hydrologic Unit 02040202, on right bank 30 ft (9 m) downstream from Trevose Road Bridge, 1 mi (1.6 km) southwest of Trevose.

DRAINAGE AREA.--5.08 mi^2 (13.16 km^2).

PERIOD OF RECORD.--July 1964 to current year.

REVISED RECORDS.--WDR PA-72: 1970(M), 1971(P). WDR PA-75-1: 1971(P), 1972(P), 1973(P), 1974(P). WDR PA-76-1: 1972(M).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 120 ft (37 m), from topographic map.

REMARKS.--Records fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--16 years, 7.60 ft^3/s (0.215 m^3/s), 20.31 in/yr (516 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,100 ft^3/s (59.5 m^3/s) Aug. 28, 1971, gage height, 8.38 ft (2.554 m) in gage well, 9.10 ft (2.774 m) outside, from floodmark, from rating curve extended above 800 ft^3/s (22.7 m^3/s) on basis of contracted-opening measurement of peak flow; minimum daily, 0.1 ft^3/s (0.003 m^3/s) Aug. 31, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft^3/s (11.3 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
July 29	1530	744	21.1	6.07	1.850	Aug. 12	0145	446	12.6	4.74	1.445
Aug. 5	2245	643	18.2	5.69	1.734	Sept. 18	0215	*752	21.3	*6.10	1.859

Minimum discharge, 0.26 ft^3/s (0.007 m^3/s) Sept. 14, gage height, 1.27 ft (0.387 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	2.9	2.9	2.2	2.2	1.4	86	8.5	3.7	2.0	5.3	.66
2	5.9	3.1	2.9	2.2	2.3	1.5	30	4.4	3.3	1.5	1.2	.66
3	5.6	33	2.7	2.0	2.3	1.4	19	4.2	5.3	16	2.5	.66
4	3.3	3.9	2.7	2.0	2.3	1.3	49	3.9	2.9	2.0	1.0	.60
5	9.0	3.3	2.7	2.3	2.3	2.3	10	3.7	2.3	12	119	.66
6	3.5	3.1	5.3	2.2	2.2	1.5	7.0	3.7	2.3	5.0	22	2.0
7	3.1	3.1	4.7	2.2	2.2	1.5	6.0	3.9	2.2	1.3	1.6	.54
8	2.9	3.1	2.9	2.2	2.2	2.7	5.3	10	2.9	1.1	1.2	.49
9	15	2.9	2.7	2.0	2.2	2.5	65	3.5	4.2	1.0	1.0	.49
10	65	9.0	2.9	1.9	2.2	13	21	3.3	3.9	2.2	.94	.49
11	7.7	18	2.9	34	2.0	15	6.9	3.7	2.2	1.4	.94	.44
12	8.1	15	2.5	24	2.0	2.2	5.9	5.6	2.0	1.3	30	.49
13	5.0	4.2	12	3.5	2.0	17	5.6	22	2.0	.94	1.2	.49
14	3.9	4.2	3.5	3.3	2.0	36	8.1	3.5	1.9	1.0	.94	.40
15	3.7	3.3	2.5	2.9	2.0	6.9	6.2	3.1	2.6	.94	1.9	9.4
16	3.5	3.3	2.7	2.7	7.7	3.7	5.3	2.9	3.7	15	.86	.66
17	3.3	3.3	3.7	2.5	2.2	3.9	5.0	3.1	1.8	1.6	.72	.60
18	3.3	3.3	2.3	12	1.8	13	5.0	7.3	1.6	1.1	.79	68
19	3.3	3.3	2.3	10	1.8	3.3	4.7	3.9	1.7	1.1	.79	1.1
20	3.3	3.1	2.3	3.3	1.8	2.9	4.7	3.5	1.6	1.0	.79	.86
21	3.5	3.1	2.3	3.1	1.8	74	4.4	15	1.5	1.0	.79	.79
22	3.1	3.1	3.5	4.7	5.9	15	4.4	3.7	1.5	15	.86	.79
23	4.2	3.1	3.9	3.7	3.1	6.6	4.2	3.3	1.5	5.0	.79	1.0
24	5.3	3.1	4.7	2.7	2.0	15	4.2	3.3	1.6	1.3	.72	.66
25	3.1	3.1	16	2.5	1.9	51	4.2	3.1	2.0	1.0	.66	2.9
26	2.9	21	3.5	2.3	1.6	6.2	4.2	2.9	1.6	1.1	.86	1.4
27	2.9	3.9	2.9	2.3	1.6	5.3	8.5	2.7	1.8	1.0	.79	.72
28	4.2	3.3	2.5	2.3	1.6	5.3	29	2.7	1.6	.94	.72	.72
29	3.1	3.1	2.5	2.3	1.4	32	12	2.7	2.0	89	.72	.66
30	2.9	2.9	2.3	2.2	---	12	5.6	2.9	15	2.3	.72	.66
31	2.9	---	2.2	2.2	---	66	---	4.4	---	1.2	.86	---
TOTAL	241.5	178.1	115.4	149.7	68.6	421.4	436.4	154.4	84.2	188.32	203.16	99.99
MEAN	7.79	5.94	3.72	4.83	2.37	13.6	14.5	4.98	2.81	6.07	6.55	3.33
MAX	65	33	16	34	7.7	74	86	22	15	89	119	68
MIN	2.9	2.9	2.2	1.9	1.4	1.3	4.2	2.7	1.5	.94	.66	.40
CFSM	1.53	1.17	.73	.95	.47	2.68	2.85	.98	.55	1.20	1.29	.66
IN.	1.77	1.30	.84	1.10	.50	3.09	3.20	1.13	.62	1.38	1.49	.73

CAL YR 1979 TOTAL 4193.10 MEAN 11.5 MAX 277 MIN 2.0 CFSM 2.26 IN 30.70
WTR YR 1980 TOTAL 2341.17 MEAN 6.40 MAX 119 MIN .40 CFSM 1.26 IN 17.14

01465798 POQUESSING CREEK AT GRANT AVENUE, PHILADELPHIA, PA

LOCATION.--Lat 40°03'25", long 74°59'08", Philadelphia County, Hydrologic Unit 02040202, on right bank 600 ft (183 m) upstream from Delaware River Expressway and 3,000 ft (914 m) upstream from mouth in northeast Philadelphia.

DRAINAGE AREA.--21.4 mi^2 (55.4 km^2).

PERIOD OF RECORD.--July 1965 to September 1970, July 1974 to current year.

GAGE.--Water-stage recorder and concrete low-water control. Datum of gage is 2.68 ft (0.817 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--11 years (Water years 1966-70, 1975-80), 32.6 ft^3/s (0.923 m^3/s), 20.67 in/yr (525 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,660 ft^3/s (132 m^3/s) Aug. 27, 1967, gage height, 10.98 ft (3.347 m), from rating curve extended above 550 ft^3/s (15.6 m^3/s); minimum, 1.1 ft^3/s (0.031 m^3/s) Aug. 29, 1966, gage height, 2.43 ft (0.741 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 28, 1971, reached a stage of 13.05 ft (3.978 m), from floodmark, discharge, 7,380 ft^3/s (209 m^3/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 800 ft^3/s (22.7 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 21	1815	952	27.0	6.43	1.960	July 29	2000	3,270	92.6	9.61	2.929
Mar. 25	0230	852	24.1	6.22	1.896	Aug. 5	2300	2,310	65.4	8.53	2.600
Apr. 9	1230	1,110	31.4	6.74	2.054	*Sept. 18	unknown	*3,770	107	*10.10	3.078
July 16	1900	829	23.5	6.17	1.881						

Minimum discharge, 1.2 ft^3/s (0.034 m^3/s) July 28, gage height, 2.66 ft (0.811 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	169	9.7	10	9.2	7.5	5.1	400	45	18	5.1	25	4.4
2	46	9.2	10	9.2	8.0	8.1	100	21	10	4.7	6.7	6.3
3	53	148	9.7	9.2	8.0	6.7	80	20	25	69	11	12
4	19	17	11	8.6	8.0	6.7	200	16	13	6.7	8.7	3.7
5	51	11	11	10	7.2	14	50	15	7.2	41	453	5.5
6	36	11	22	9.2	6.7	7.2	35	15	6.7	41	244	43
7	12	10	39	13	6.7	6.3	30	19	6.7	4.0	18	3.1
8	10	9.7	10	12	6.7	15	26	67	14	3.1	12	2.0
9	14	9.7	8.6	9.2	6.7	15	260	16	11	3.7	9.2	2.2
10	376	28	9.2	9.2	6.7	35	113	14	27	5.5	7.6	2.2
11	48	57	9.2	307	6.7	119	34	16	7.6	4.7	7.6	2.0
12	40	97	9.2	38	6.7	12	28	33	5.9	3.1	140	2.0
13	29	18	56	15	6.3	64	27	89	5.5	3.4	9.7	2.1
14	17	19	23	14	6.7	207	53	16	5.5	2.9	7.2	2.1
15	15	13	11	12	6.7	35	31	14	8.1	3.1	8.7	65
16	14	13	10	11	42	19	23	12	31	124	8.1	3.6
17	13	11	22	10	9.7	17	21	12	5.9	23	4.4	2.8
18	13	11	9.2	90	6.7	50	20	42	4.7	7.2	4.4	490
19	11	10	9.7	23	6.7	16	19	17	5.1	3.4	4.7	8.6
20	12	10	11	13	6.7	13	19	17	4.7	5.5	5.1	5.3
21	11	10	11	12	6.7	318	19	71	4.4	6.3	4.7	3.9
22	11	10	18	20	43	64	18	16	4.4	41	4.4	3.7
23	11	9.7	18	15	27	29	18	13	4.7	67	4.7	3.6
24	26	10	23	11	10	27	18	13	5.1	8.1	4.7	3.2
25	11	9.7	73	10	8.7	242	17	11	6.7	3.1	5.1	16
26	10	105	17	9.0	7.6	30	16	9.7	5.1	2.4	5.9	8.1
27	9.7	22	12	8.5	6.7	22	57	8.6	6.3	2.0	5.5	3.3
28	16	13	11	8.0	6.3	20	131	8.7	5.5	1.8	5.5	2.9
29	12	12	10	8.0	5.5	140	59	8.1	6.7	918	4.4	2.7
30	9.7	11	10	7.5	---	57	26	9.2	61	44	4.4	3.0
31	9.2	---	9.7	7.5	---	90	---	16	---	11	3.4	---
TOTAL	1134.6	734.7	523.5	748.3	298.6	1720.1	1948	700.3	332.5	1468.8	1047.8	718.3
MEAN	36.6	24.5	16.9	24.1	10.3	55.5	64.9	22.6	11.1	47.4	33.8	23.9
MAX	376	148	73	307	43	318	400	89	61	918	453	490
MIN	9.2	9.2	8.6	7.5	5.5	5.1	16	8.1	4.4	1.8	3.4	2.0
CFSM	1.71	1.15	.79	1.13	.48	2.59	3.03	1.06	.52	2.22	1.58	1.12
IN.	1.97	1.28	.91	1.30	.52	2.99	3.39	1.22	.58	2.55	1.82	1.25

CAL YR 1979 TOTAL 19444.0 MEAN 53.3 MAX 1560 MIN 5.8 CFSM 2.49 IN 33.80
WTR YR 1980 TOTAL 11375.5 MEAN 31.1 MAX 918 MIN 1.8 CFSM 1.45 IN 19.77

01467030 DELAWARE RIVER AT TORRESDALE INTAKE AT PHILADELPHIA, PA

LOCATION.--Lat 40°01'57", long 74°59'46", Philadelphia County, Hydrologic Unit 02040202, water-quality recorder (40°02'05", 74°59'57") located on right bank in inactive building at Torresdale Filter Plant, 1.7 mi (2.7 km) downstream from Poquessing Creek.

DRAINAGE AREA.--7,781 mi^2 (20,200 km^2).

PERIOD OF RECORD.--August 1949 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1963 to current year.
pH: June 1968 to current year.
WATER TEMPERATURES: October 1956 to September 1957, November 1960 to current year.
DISSOLVED OXYGEN: January 1961 to current year.

REMARKS.--Further information on this station is given in U.S. Geological Survey Water-Supply Paper 1809-O.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 865 micromhos Jan. 10, 1977; minimum, 71 micromhos July 24, 1970.
pH: Maximum, 8.1 Dec. 30, 1970; minimum, 4.9 Apr. 5, 1969.
WATER TEMPERATURES: Maximum, 32.5°C July 21, 1977; minimum, freezing point on many days during winter months.
DISSOLVED OXYGEN: Maximum, 14.5 mg/L Feb. 4-5, 1964; minimum, 0.0 mg/L on many days during 1962 and 1965.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 470 micromhos Mar. 8; minimum, 88 micromhos Oct. 10.
pH: Maximum, 7.7 Mar. 10; minimum, 6.1 on many days.
WATER TEMPERATURES: Maximum, 31.5°C several days in July and August; minimum, 1.5°C on many days during January and February.
DISSOLVED OXYGEN: Maximum, 13.1 mg/L Mar. 10, minimum, 1.9 mg/L Sept. 25.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	179	114	162	213	184	194	135	97	105	186	147	156
2	169	147	158	257	183	196	167	101	114	194	148	155
3	231	147	158	252	182	193	143	110	119	200	150	157
4	185	145	156	210	184	192	152	117	124	181	151	158
5	221	126	146	210	188	196	162	125	132	188	155	163
6	193	113	125	208	179	189	155	129	136	241	159	170
7	139	101	111	219	150	178	297	138	158	277	160	174
8	145	94	107	180	135	151	237	144	157	251	166	185
9	222	89	105	180	131	144	208	147	159	226	168	182
10	187	88	104	261	132	156	217	152	164	245	173	187
11	206	95	117	229	140	154	210	156	167	255	174	187
12	264	122	137	209	145	161	207	158	170	279	180	201
13	194	130	144	203	151	161	272	163	179	226	190	205
14	207	136	149	212	158	168	232	170	182	245	199	211
15	189	138	152	209	161	171	208	172	180	259	204	214
16	204	148	159	219	165	174	218	177	186	260	200	212
17	227	153	164	215	168	176	209	163	188	242	197	206
18	218	157	167	221	172	181	215	184	190	287	194	205
19	231	162	169	224	175	184	210	184	190	272	194	206
20	225	165	176	229	179	188	209	189	194	221	193	201
21	228	170	179	216	181	188	226	187	194	219	195	200
22	248	173	183	219	183	191	220	186	194	216	185	196
23	278	176	188	230	186	195	263	187	201	224	184	193
24	265	176	189	239	189	198	289	193	210	219	184	189
25	222	175	185	238	190	199	330	195	214	200	182	187
26	216	177	186	243	190	202	259	201	214	212	183	190
27	220	180	190	212	188	197	246	202	213	225	185	194
28	218	185	192	224	172	193	216	193	200	226	187	197
29	245	191	200	173	112	140	229	179	193	249	190	211
30	234	192	199	136	98	107	203	160	177	245	215	222
31	217	187	196	---	---	---	193	150	164	249	219	226
MONTH	278	88	160	261	98	177	330	97	173	287	147	192

01467030 DELAWARE RIVER AT TORRESDALE INTAKE AT PHILADELPHIA, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	245	219	224	291	263	270	---	---	---	---	---	---
2	250	221	228	291	262	269	---	---	---	182	132	142
3	263	224	232	365	262	275	---	---	---	246	130	142
4	268	228	238	347	263	278	---	---	---	193	130	139
5	279	231	240	365	262	280	---	---	---	182	133	142
6	273	230	242	382	265	282	---	---	---	225	138	151
7	287	236	244	322	264	275	257	132	158	225	129	145
8	290	238	248	470	262	283	265	131	153	229	132	144
9	287	241	250	375	265	281	267	129	145	172	136	143
10	292	246	254	399	263	279	191	134	150	177	139	146
11	306	245	261	280	244	269	200	138	149	183	142	149
12	300	253	266	298	270	280	229	118	142	205	145	155
13	308	262	274	303	272	278	183	105	123	240	151	165
14	299	268	276	454	276	312	216	112	124	194	158	165
15	296	268	274	369	263	289	212	116	130	198	166	170
16	324	266	275	310	258	271	183	122	131	197	166	173
17	296	268	276	311	243	261	189	125	136	209	169	176
18	299	268	275	297	231	243	167	120	131	222	166	175
19	288	264	272	268	226	234	171	119	129	204	168	175
20	283	263	270	291	206	224	230	122	133	231	171	178
21	292	256	270	237	169	199	183	124	133	220	170	177
22	287	254	268	223	135	156	225	128	138	203	171	178
23	300	188	268	153	94	125	199	132	145	232	176	186
24	316	260	272	237	91	107	219	138	149	222	184	192
25	282	262	268	197	93	125	210	142	154	247	189	198
26	294	263	271	227	110	129	224	147	159	229	193	200
27	322	265	274	230	119	139	---	---	---	230	194	200
28	295	265	273	209	119	135	---	---	---	232	195	201
29	290	264	271	251	119	145	---	---	---	223	196	201
30	---	---	---	215	131	147	---	---	---	216	197	201
31	---	---	---	195	137	147	---	---	---	216	198	202
MONTH	324	188	260	470	91	225	267	105	141	247	129	170

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	258	202	209	263	249	254	---	---	---	290	251	259
2	256	206	213	350	251	259	---	---	---	389	253	263
3	253	210	217	274	253	257	---	---	---	290	253	260
4	252	214	221	269	254	258	---	---	---	283	254	262
5	251	217	224	281	256	260	---	---	---	283	260	265
6	247	222	228	269	251	258	242	228	237	282	257	263
7	259	225	233	264	253	256	246	237	241	279	259	266
8	274	232	238	264	251	254	261	239	245	279	259	267
9	257	233	238	265	249	255	272	243	249	279	258	266
10	242	230	233	276	246	257	263	247	251	283	256	264
11	246	228	233	274	244	257	271	247	252	280	255	264
12	244	226	232	273	240	253	259	235	246	276	253	260
13	244	225	231	268	237	248	253	241	245	292	253	262
14	244	226	231	258	234	244	254	241	246	298	254	264
15	260	229	236	305	235	246	255	240	245	295	251	260
16	276	228	235	270	236	244	255	238	244	272	246	255
17	246	227	233	269	234	240	256	235	242	269	245	255
18	267	227	235	260	235	243	245	229	236	251	167	237
19	257	227	232	265	237	245	252	230	236	249	230	239
20	259	227	232	296	239	247	256	229	237	258	237	242
21	249	227	232	271	242	249	257	228	236	253	242	246
22	257	229	235	304	237	248	288	229	236	262	247	251
23	274	231	238	253	238	241	256	230	239	273	249	257
24	291	235	242	244	236	239	269	233	242	273	247	254
25	271	238	244	256	238	244	265	236	244	283	245	257
26	268	240	246	260	242	247	270	239	248	275	244	254
27	285	243	250	257	244	249	270	244	252	262	241	250
28	295	246	253	263	246	251	283	248	256	267	242	251
29	277	247	254	259	214	248	269	248	256	269	237	249
30	279	248	252	---	---	---	299	248	257	264	239	250
31	---	---	---	---	---	---	304	250	260	---	---	---
MONTH	295	202	234	350	214	250	304	228	245	389	167	256

01467030 DELAWARE RIVER AT TORRESDALE INTAKE AT PHILADELPHIA, PA--Continued

PH (UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	6.5	6.4	6.5	6.9	6.7	6.7	6.2	6.1	6.2	7.1	6.8	7.0
2	6.7	6.4	6.5	6.9	6.7	6.7	6.3	6.2	6.2	6.9	6.7	6.8
3	6.7	6.6	6.7	6.8	6.7	6.7	6.2	6.1	6.2	6.7	6.6	6.7
4	6.7	6.6	6.7	6.7	6.6	6.7	6.2	6.1	6.2	---	---	---
5	6.8	6.6	6.6	6.8	6.6	6.7	6.2	6.1	6.2	---	---	---
6	6.7	6.6	6.7	6.7	6.6	6.7	6.2	6.1	6.1	---	---	---
7	6.6	6.5	6.6	6.8	6.6	6.6	6.4	6.2	6.2	---	---	---
8	6.7	6.5	6.6	6.8	6.5	6.6	6.4	6.2	6.2	---	---	---
9	6.8	6.5	6.6	6.6	6.5	6.5	6.3	6.1	6.2	---	---	---
10	6.6	6.4	6.5	6.8	6.4	6.5	6.3	6.1	6.2	---	---	---
11	7.0	6.4	6.7	6.8	6.3	6.5	6.7	6.1	6.4	---	---	---
12	7.1	6.8	6.9	6.9	6.5	6.6	6.7	6.6	6.6	---	---	---
13	6.9	6.7	6.9	6.6	6.5	6.6	6.8	6.6	6.7	---	---	---
14	7.1	6.9	6.9	6.9	6.5	6.6	6.7	6.6	6.7	---	---	---
15	7.0	6.4	6.7	6.7	6.6	6.6	6.7	6.6	6.7	---	---	---
16	6.7	6.6	6.6	6.9	6.6	6.7	6.8	6.6	6.7	---	---	---
17	6.7	6.6	6.6	6.8	6.6	6.6	6.8	6.5	6.7	---	---	---
18	6.7	6.5	6.6	6.7	6.6	6.6	6.7	6.5	6.6	---	---	---
19	6.9	6.6	6.6	6.9	6.5	6.6	6.6	6.4	6.5	---	---	---
20	6.8	6.6	6.6	6.7	6.5	6.6	6.6	6.4	6.5	---	---	---
21	6.8	6.6	6.6	6.7	6.6	6.6	6.4	6.3	6.4	---	---	---
22	6.7	6.6	6.6	6.6	6.5	6.6	6.4	6.2	6.3	---	---	---
23	6.9	6.6	6.6	6.6	6.5	6.6	6.3	6.2	6.2	---	---	---
24	6.8	6.6	6.6	6.7	6.6	6.6	6.3	6.1	6.2	---	---	---
25	7.1	6.7	6.8	6.7	6.5	6.6	6.6	6.1	6.3	---	---	---
26	7.1	6.7	6.8	6.7	6.6	6.7	6.5	6.2	6.4	---	---	---
27	7.1	6.7	6.8	6.8	6.6	6.7	6.5	6.3	6.4	---	---	---
28	6.9	6.7	6.8	6.9	6.7	6.8	6.5	6.2	6.3	---	---	---
29	7.0	6.7	6.7	6.8	6.4	6.5	6.5	6.3	6.4	---	---	---
30	6.9	6.7	6.7	6.4	6.2	6.3	6.4	6.3	6.4	---	---	---
31	6.8	6.7	6.7	---	---	---	7.2	6.2	6.8	---	---	---
MONTH	7.1	6.4	6.7	6.9	6.2	6.6	7.2	6.1	6.4	7.1	6.6	6.8

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	---	---	---	7.5	7.4	7.4	---	---	---	---	---	---
2	---	---	---	7.5	7.4	7.4	---	---	---	7.2	7.1	7.2
3	---	---	---	7.5	7.4	7.4	---	---	---	7.3	7.1	7.2
4	---	---	---	7.5	7.4	7.4	---	---	---	7.2	7.0	7.1
5	---	---	---	7.5	7.4	7.4	---	---	---	7.2	7.1	7.1
6	7.1	7.0	---	7.5	7.4	7.4	---	---	---	7.3	7.1	7.2
7	7.2	7.0	7.1	7.5	7.4	7.4	7.3	7.1	7.2	7.2	6.7	7.1
8	7.3	7.0	7.1	7.5	7.1	7.4	7.3	7.1	7.2	7.1	7.0	7.1
9	7.2	7.0	7.1	7.4	7.3	7.4	7.2	7.0	7.1	7.2	7.0	7.1
10	7.3	7.0	7.1	7.7	7.3	7.4	7.1	7.0	7.1	7.3	6.9	7.1
11	7.1	6.7	6.9	7.4	7.1	7.4	7.1	7.0	7.1	7.2	7.1	7.1
12	7.0	6.7	6.8	7.5	7.4	7.4	7.2	6.9	7.1	7.1	7.0	7.1
13	6.9	6.8	6.8	7.6	7.4	7.5	7.1	7.0	7.0	7.1	7.0	7.0
14	6.9	6.8	6.8	7.5	7.3	7.4	7.2	7.0	7.1	7.2	7.0	7.1
15	7.0	6.8	6.9	7.4	7.2	7.4	7.2	7.0	7.1	7.1	7.1	7.1
16	6.9	6.8	6.9	7.4	7.3	7.4	7.2	7.1	7.1	7.1	7.0	7.1
17	7.0	6.7	6.9	7.4	7.3	7.4	7.2	7.1	7.1	7.1	6.8	7.0
18	7.0	6.8	6.9	7.4	7.3	7.3	7.2	7.0	7.1	7.1	7.0	7.0
19	7.0	6.7	6.9	7.3	7.2	7.3	7.1	7.0	7.1	7.0	6.9	7.0
20	7.1	6.7	6.9	7.4	7.2	7.2	7.2	6.9	7.1	7.1	6.9	7.0
21	7.3	6.8	7.0	7.2	7.0	7.2	7.2	7.1	7.1	7.1	7.0	7.0
22	7.4	6.9	7.1	7.2	7.0	7.1	7.2	7.1	7.1	7.1	7.0	7.0
23	7.3	7.2	7.3	7.1	6.9	7.0	7.3	7.1	7.2	7.1	7.0	7.0
24	7.4	7.3	7.3	7.1	6.8	6.9	7.3	7.1	7.2	7.1	6.9	7.0
25	7.4	7.3	7.3	7.1	6.9	7.0	7.3	7.1	7.1	7.1	7.0	7.0
26	7.4	7.2	7.4	7.2	6.9	7.0	7.2	6.8	7.1	7.2	7.0	7.1
27	7.6	7.3	7.4	7.2	7.0	7.1	---	---	---	7.2	7.0	7.1
28	7.5	7.3	7.4	7.2	7.0	7.1	---	---	---	7.3	7.0	7.2
29	7.5	7.3	7.4	7.2	6.9	7.1	---	---	---	7.4	7.0	7.2
30	---	---	---	7.2	7.1	7.1	---	---	---	7.4	7.1	7.2
31	---	---	---	7.2	7.1	7.2	---	---	---	7.2	7.1	7.1
MONTH	7.6	6.7	7.1	7.7	6.8	7.3	7.3	6.8	7.1	7.4	6.7	7.1

01467030 DELAWARE RIVER AT TORRESDALE INTAKE AT PHILADELPHIA, PA--Continued

PH (UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.2	7.0	7.1	6.9	6.6	6.8	---	---	---	6.6	6.4	6.4
2	7.3	6.9	7.1	7.1	6.7	6.9	---	---	---	6.7	6.3	6.4
3	7.2	7.0	7.1	6.9	6.7	6.8	---	---	---	6.6	6.3	6.4
4	7.1	6.9	7.0	6.8	6.7	6.8	---	---	---	6.9	6.4	6.6
5	7.1	6.9	7.0	6.9	6.7	6.8	---	---	---	6.8	6.6	6.7
6	7.1	6.9	7.0	6.8	6.7	6.7	6.6	6.5	6.5	6.8	6.5	6.7
7	7.0	6.9	7.0	6.9	6.7	6.8	6.6	6.5	6.5	6.8	6.6	6.6
8	7.0	6.8	6.9	7.0	6.7	6.9	6.6	6.4	6.5	6.7	6.5	6.6
9	7.0	6.9	6.9	7.0	6.7	6.9	6.6	6.4	6.5	6.8	6.5	6.6
10	7.1	6.8	7.0	6.9	6.7	6.8	6.6	6.4	6.5	6.8	6.5	6.7
11	7.1	6.9	7.0	6.9	6.6	6.8	6.6	6.4	6.5	6.8	6.5	6.6
12	7.2	6.9	7.1	6.9	6.6	6.7	6.7	6.4	6.6	6.9	6.6	6.7
13	7.3	6.9	7.1	6.9	6.6	6.8	6.7	6.4	6.6	6.9	6.6	6.7
14	7.2	7.0	7.1	6.9	6.6	6.8	6.8	6.5	6.6	7.0	6.6	6.7
15	7.2	7.0	7.1	7.2	6.7	6.8	6.7	6.5	6.6	6.8	6.6	6.7
16	7.1	6.9	7.0	7.1	6.8	6.9	6.7	6.4	6.5	6.9	6.6	6.7
17	7.1	6.9	7.0	6.9	6.7	6.8	6.7	6.4	6.5	7.0	6.6	6.8
18	7.2	6.9	7.0	6.8	6.6	6.7	6.7	6.5	6.6	6.8	6.5	6.7
19	7.1	6.9	7.0	6.8	6.6	6.7	6.7	6.5	6.5	6.7	6.6	6.7
20	7.2	6.9	7.0	6.9	6.6	6.7	6.7	6.4	6.5	6.7	6.6	6.7
21	7.0	6.9	7.0	7.0	6.6	6.7	6.7	6.4	6.5	6.7	6.6	6.6
22	7.0	6.8	6.9	6.9	6.6	6.8	6.7	6.4	6.5	6.6	6.5	6.6
23	7.1	6.8	6.9	6.8	6.6	6.7	6.6	6.3	6.5	6.7	6.5	6.6
24	7.2	6.8	7.0	6.7	6.6	6.7	6.7	6.3	6.5	6.7	6.5	6.6
25	7.2	6.9	7.0	6.7	6.5	6.6	6.7	6.4	6.5	6.7	6.5	6.6
26	7.1	6.8	7.0	6.7	6.5	6.6	6.6	6.3	6.5	6.8	6.5	6.7
27	7.0	6.7	6.9	6.8	6.5	6.7	6.6	6.3	6.5	6.8	6.6	6.7
28	7.0	6.8	6.9	6.8	6.6	6.7	6.6	6.3	6.4	6.9	6.6	6.7
29	6.9	6.7	6.9	6.8	6.6	6.7	6.6	6.3	6.4	7.1	6.6	6.8
30	6.9	6.7	6.8	---	---	---	6.6	6.3	6.4	7.0	6.6	6.8
31	---	---	---	---	---	---	6.7	6.4	6.4	---	---	---
MONTH	7.3	6.7	7.0	7.2	6.5	6.8	6.8	6.3	6.5	7.1	6.3	6.7

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	20.0	19.0	19.5	14.5	12.5	13.5	10.0	8.5	9.0	5.5	4.5	5.5
2	20.5	19.0	20.0	14.5	13.0	14.0	9.0	6.5	8.0	5.5	5.0	5.0
3	20.5	20.0	20.5	15.0	12.5	13.5	7.5	5.5	7.0	5.5	4.5	5.0
4	20.5	19.5	20.0	13.0	11.5	12.5	7.0	5.5	6.5	5.0	4.0	4.5
5	20.0	18.5	19.5	13.0	12.0	12.5	6.5	5.5	6.0	4.0	3.0	4.0
6	19.0	18.0	18.5	12.5	12.0	12.5	6.0	5.5	5.5	4.5	3.0	4.0
7	18.5	17.0	18.0	12.0	11.0	11.5	8.0	5.5	6.0	3.5	2.5	3.5
8	17.0	16.0	16.5	11.0	10.5	11.0	6.5	5.5	5.5	4.0	3.0	3.5
9	16.0	15.5	16.0	11.5	10.5	10.5	6.5	4.5	5.5	3.5	3.0	3.0
10	15.5	11.0	14.5	13.0	10.5	11.0	6.5	4.5	5.5	3.5	2.0	3.0
11	14.0	12.0	13.5	12.0	10.5	11.0	7.0	5.5	6.0	5.0	2.5	3.5
12	13.5	12.5	13.0	12.0	10.5	11.0	7.0	6.0	6.5	8.0	3.5	4.5
13	13.0	12.5	12.5	11.0	10.5	11.0	8.0	6.5	6.5	4.0	3.0	3.5
14	12.5	11.5	12.0	11.5	10.5	11.0	6.5	6.0	6.5	5.0	3.5	4.0
15	12.5	11.5	12.0	11.0	10.0	11.0	6.5	5.5	6.0	5.5	4.5	5.0
16	12.5	11.5	12.0	11.0	10.0	10.5	6.5	6.0	6.5	5.5	4.5	5.0
17	13.0	12.0	12.5	10.5	9.5	10.5	10.5	5.0	6.5	5.5	5.0	5.0
18	13.5	12.5	13.0	11.0	10.0	10.5	6.0	4.5	5.5	6.0	5.0	5.0
19	14.0	13.0	13.5	11.0	10.0	10.5	5.5	3.5	5.0	7.0	5.0	5.5
20	14.5	13.5	14.0	11.0	10.0	10.5	5.0	4.0	4.5	6.5	5.5	5.5
21	15.5	14.0	14.5	11.0	10.0	10.5	4.5	3.5	4.0	6.0	5.0	5.5
22	16.5	14.5	15.0	11.0	10.0	10.5	4.5	4.0	4.0	5.5	5.0	5.5
23	18.0	15.0	16.0	11.5	10.0	10.5	4.5	4.0	4.0	6.0	5.0	5.5
24	16.5	15.5	16.0	12.5	10.5	11.0	5.0	3.5	4.0	5.0	2.5	4.5
25	15.5	14.5	15.5	13.5	11.0	11.5	9.0	4.0	5.0	4.5	3.5	4.0
26	15.5	14.5	15.0	16.0	11.5	13.0	6.0	4.5	5.0	4.5	3.0	4.0
27	16.0	14.5	15.0	13.5	12.0	12.5	6.0	4.5	5.0	4.0	2.5	3.5
28	15.5	14.5	15.0	14.5	12.5	13.5	6.5	5.5	6.0	4.0	3.5	4.0
29	15.0	13.5	15.0	14.0	10.5	12.0	6.5	5.5	6.0	4.5	3.0	4.0
30	14.5	13.0	14.5	11.5	8.5	10.5	6.5	5.5	6.0	3.5	2.0	3.0
31	14.5	12.5	14.0	---	---	---	6.0	5.0	5.5	3.5	1.5	3.0
MONTH	20.5	11.0	15.5	16.0	8.5	11.5	10.5	3.5	6.0	8.0	1.5	4.5

01467030 DELAWARE RIVER AT TORRESDALE INTAKE AT PHILADELPHIA, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.5	1.5	2.5	4.5	3.0	4.0	---	---	---	---	---	---
2	2.0	1.5	2.0	4.5	3.0	4.0	---	---	---	16.0	13.0	14.0
3	2.5	1.5	1.5	5.0	2.5	3.5	---	---	---	16.5	13.5	14.5
4	3.0	1.5	1.5	5.0	3.0	4.0	---	---	---	17.5	14.5	15.5
5	3.0	1.5	1.5	4.5	3.5	4.0	---	---	---	19.0	16.0	17.0
6	1.5	1.5	1.5	6.5	4.0	4.5	---	---	---	20.5	17.0	18.0
7	2.0	1.5	1.5	6.0	4.0	5.0	14.5	11.0	12.0	21.5	18.0	19.0
8	3.0	1.5	1.5	9.5	5.0	6.0	15.0	11.0	12.0	19.0	18.5	19.0
9	2.0	1.5	1.5	8.5	5.5	6.0	14.0	12.0	12.5	19.5	17.5	19.0
10	2.5	1.5	2.0	11.0	5.5	6.5	15.0	12.5	13.0	19.5	17.5	19.0
11	2.5	1.5	2.0	8.5	6.0	6.5	14.5	13.0	13.5	19.0	18.0	19.0
12	2.5	1.5	2.0	7.0	4.5	6.0	15.0	13.0	13.5	19.0	18.0	19.0
13	2.5	1.5	2.0	7.0	6.0	6.5	14.0	13.0	13.5	19.5	18.5	19.0
14	2.5	1.5	2.5	6.5	3.5	6.0	13.5	12.5	13.0	20.0	18.5	19.0
15	3.5	2.0	2.5	7.5	5.5	6.5	14.5	13.0	13.5	19.5	18.5	19.0
16	3.0	2.0	2.5	8.0	6.0	7.0	13.0	11.5	13.0	20.0	18.5	19.0
17	3.0	2.0	2.5	9.0	7.0	7.5	13.5	11.0	12.0	21.5	19.0	19.5
18	3.0	1.5	2.5	10.0	6.5	8.0	14.0	11.5	11.5	20.0	19.5	19.5
19	3.5	1.5	2.5	9.5	7.0	7.5	14.5	11.0	12.0	21.5	19.0	20.0
20	4.5	2.0	3.0	10.5	7.5	8.5	15.0	11.5	12.5	21.0	20.0	20.0
21	5.5	3.0	3.5	12.5	8.5	9.0	15.0	12.5	13.0	20.0	19.0	20.0
22	4.5	3.5	3.5	9.5	7.5	8.0	15.0	13.0	13.5	21.5	19.0	20.0
23	6.0	3.5	4.5	7.5	5.0	6.5	16.0	13.5	14.0	22.5	20.0	21.0
24	7.0	4.5	5.0	7.5	4.5	5.0	16.0	14.5	15.5	22.0	21.0	21.5
25	5.5	4.5	5.0	8.5	5.0	6.5	16.5	15.5	16.0	22.5	21.5	22.0
26	5.0	4.0	4.5	7.5	6.0	6.5	16.0	15.5	16.0	22.5	21.0	22.0
27	4.5	3.5	4.5	8.5	6.0	6.5	---	---	---	22.0	21.0	22.0
28	5.0	3.5	4.5	8.0	6.5	7.0	---	---	---	22.5	21.5	22.0
29	4.5	2.5	4.5	10.5	7.0	7.5	---	---	---	23.5	22.0	22.5
30	---	---	---	10.0	7.5	8.5	---	---	---	23.0	22.0	22.5
31	---	---	---	9.0	5.5	8.5	---	---	---	23.0	22.5	23.0
MONTH	7.0	1.5	3.0	12.5	2.5	6.5	16.5	11.0	13.5	23.5	13.0	19.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	24.5	22.5	23.5	28.0	26.0	27.0	---	---	---	30.5	28.0	29.0
2	25.0	23.5	24.0	29.0	26.5	27.0	---	---	---	30.5	28.5	29.0
3	26.0	24.0	24.5	27.5	27.0	27.5	---	---	---	30.0	28.0	29.0
4	25.0	23.0	24.5	29.0	27.0	27.5	---	---	---	29.5	28.0	29.0
5	25.5	23.0	24.0	29.0	27.5	28.0	---	---	---	29.0	28.0	29.0
6	25.0	23.5	24.0	28.5	26.5	28.0	30.5	29.5	30.5	29.5	28.5	29.0
7	26.0	23.5	24.5	28.0	26.0	27.5	31.0	30.0	30.5	29.0	28.0	29.0
8	25.5	24.5	25.0	27.5	26.5	27.0	31.0	30.5	30.5	29.0	27.5	28.5
9	24.5	23.0	24.0	28.0	27.0	27.5	31.5	30.0	30.5	29.0	27.5	28.0
10	23.5	22.0	23.5	28.5	27.5	28.0	31.5	30.0	31.0	28.5	27.5	28.0
11	23.5	22.5	23.0	28.5	27.5	28.0	31.5	30.5	31.0	28.5	26.5	27.5
12	24.0	22.5	23.5	29.0	27.5	28.0	31.0	30.0	30.5	28.5	26.0	27.0
13	24.5	23.0	23.5	29.0	27.5	28.0	31.5	29.5	30.5	28.5	26.5	27.5
14	25.0	23.0	24.0	29.5	27.5	28.5	31.0	29.5	30.0	27.5	27.0	27.0
15	25.5	23.5	24.0	29.5	27.5	28.5	30.0	29.5	30.0	27.5	26.5	27.0
16	24.5	23.5	24.0	30.0	27.5	28.5	30.0	28.5	29.5	26.5	25.5	26.0
17	25.0	22.5	24.0	30.0	27.5	28.5	30.0	28.0	29.0	26.0	24.5	25.5
18	24.5	23.5	24.0	30.0	28.5	29.0	28.5	27.5	28.5	25.5	23.0	25.0
19	25.5	23.0	24.0	30.5	28.5	29.0	28.5	27.5	28.0	25.5	24.0	25.0
20	24.0	23.0	24.0	31.5	29.0	29.5	28.5	27.5	28.0	25.5	24.0	25.0
21	24.5	22.5	23.5	31.5	29.5	30.0	28.0	27.0	27.5	25.5	24.5	25.0
22	25.0	23.0	24.0	31.0	29.5	30.0	27.5	26.0	27.0	26.0	25.0	25.5
23	25.5	23.5	24.5	30.0	28.5	29.5	28.0	26.5	27.5	26.0	25.0	25.5
24	25.5	24.5	25.0	30.0	29.0	29.5	28.0	27.0	27.5	25.5	24.0	25.0
25	26.0	25.0	25.5	30.5	29.5	29.5	28.5	27.5	28.0	25.0	23.5	24.5
26	26.0	25.0	25.5	30.5	29.5	30.0	29.0	27.5	28.0	24.5	23.5	24.0
27	27.0	25.5	26.0	31.0	29.5	30.0	29.0	28.0	28.5	23.5	22.0	23.0
28	27.5	26.0	26.5	30.5	29.5	30.0	29.5	28.0	28.5	23.5	22.0	23.0
29	28.0	26.0	26.5	30.5	28.5	29.5	29.0	28.0	28.5	22.5	21.5	22.5
30	27.5	26.5	26.5	---	---	---	29.5	28.0	28.5	22.5	21.5	22.0
31	---	---	---	---	---	---	30.0	28.0	28.5	---	---	---
MONTH	28.0	22.0	24.5	31.5	26.0	28.5	31.5	26.0	29.0	30.5	21.5	26.5

01467030 DELAWARE RIVER AT TORRESDALE INTAKE AT PHILADELPHIA, PA--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	8.8	6.9	7.5	8.7	5.9	7.8	10.6	9.4	10.2	12.0	11.0	11.6
2	7.7	6.7	7.0	8.9	5.9	8.1	11.1	10.1	10.7	12.0	11.4	11.7
3	7.0	4.0	6.7	9.0	4.8	8.3	11.5	10.8	11.2	12.1	11.6	11.8
4	7.4	5.9	6.8	9.6	8.3	9.0	11.8	10.4	11.4	12.1	11.6	11.9
5	7.6	3.8	6.9	9.6	9.0	9.4	11.9	10.2	11.5	12.2	11.8	12.0
6	8.1	6.2	7.6	9.6	8.4	9.1	12.1	10.3	11.6	12.3	11.3	12.0
7	8.1	6.5	7.7	10.1	8.3	9.3	12.1	9.8	11.7	12.6	11.9	12.3
8	8.5	7.8	8.2	10.2	8.6	9.7	12.3	11.2	12.0	12.5	11.8	12.3
9	8.7	8.3	8.5	10.5	9.1	10.0	12.2	11.7	12.1	12.4	10.6	11.9
10	10.0	6.5	8.6	10.5	6.1	9.9	12.2	11.7	12.0	12.5	11.9	12.2
11	9.5	7.8	8.4	10.4	8.1	9.9	12.0	9.7	11.6	12.7	12.1	12.4
12	---	---	---	10.4	7.4	9.8	11.7	8.8	10.9	12.6	9.6	12.0
13	---	---	---	10.3	8.3	9.9	11.5	5.8	10.4	12.5	11.9	12.3
14	---	---	---	10.1	8.7	9.8	11.5	10.0	11.0	12.6	12.2	12.4
15	9.8	8.6	9.5	10.0	8.6	9.7	11.6	9.4	11.1	12.6	10.9	12.3
16	9.9	6.6	9.3	10.1	8.6	9.7	11.5	11.0	11.3	12.3	10.4	11.9
17	9.8	8.3	9.3	10.0	8.2	9.6	12.1	10.8	11.2	12.0	10.9	11.7
18	9.8	7.9	9.3	10.1	9.4	9.7	11.5	11.1	11.2	12.0	10.5	11.7
19	9.6	5.2	9.0	10.1	8.9	9.7	11.7	11.1	11.4	12.0	10.8	11.7
20	9.3	6.5	8.7	10.1	7.9	9.6	11.9	11.2	11.6	12.0	11.2	11.7
21	9.2	8.3	8.9	10.0	7.8	9.3	11.9	10.8	11.5	12.0	11.6	11.8
22	9.1	7.4	8.8	10.1	7.4	9.2	11.9	9.5	11.4	12.0	11.1	11.6
23	8.8	7.7	8.5	10.2	7.5	9.4	12.0	10.4	11.5	11.7	10.5	11.3
24	8.7	7.5	8.4	10.0	6.6	9.2	12.2	11.5	11.8	11.7	10.7	11.4
25	8.7	6.1	8.2	10.0	7.9	9.4	12.3	9.7	11.8	11.7	11.2	11.4
26	8.5	5.4	7.8	10.0	4.4	8.9	12.4	11.2	12.0	11.8	11.2	11.5
27	8.3	5.7	7.6	9.9	7.0	9.2	12.4	11.0	12.1	12.0	11.4	11.6
28	8.3	7.7	7.9	9.9	8.4	9.4	12.1	10.6	11.6	11.7	11.2	11.5
29	8.0	5.4	7.4	9.8	8.5	9.4	11.6	11.0	11.4	12.1	11.3	11.6
30	8.3	7.2	7.8	10.3	9.1	9.8	11.8	11.3	11.5	12.2	11.5	11.8
31	8.5	5.9	7.7	---	---	---	11.9	10.9	11.6	12.3	11.3	11.9
MONTH	10.0	3.8	8.1	10.5	4.4	9.4	12.4	5.8	11.4	12.7	9.6	11.9

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	12.6	11.7	12.1	11.5	10.8	11.2	---	---	---	---	---	---
2	12.7	12.0	12.4	11.5	10.9	11.2	---	---	---	9.9	9.6	9.8
3	12.7	12.2	12.5	11.8	10.9	11.2	---	---	---	9.8	9.3	9.6
4	12.8	12.1	12.5	11.7	10.7	11.2	---	---	---	9.6	9.1	9.4
5	12.7	12.3	12.5	11.9	10.9	11.3	---	---	---	9.3	8.8	9.1
6	12.6	12.0	12.4	11.8	10.9	11.3	---	---	---	9.0	8.2	8.8
7	12.7	12.3	12.5	11.6	11.0	11.2	11.1	10.4	10.8	8.9	7.5	8.5
8	12.8	12.2	12.5	12.5	10.8	11.2	11.1	10.3	10.8	8.4	7.1	8.0
9	12.8	12.2	12.4	11.6	10.6	11.1	10.9	9.1	10.4	7.8	6.7	7.4
10	12.7	12.1	12.4	13.1	10.9	11.3	10.5	9.4	10.1	9.0	7.2	8.1
11	12.6	12.1	12.4	11.7	10.2	11.2	10.1	9.4	9.7	8.4	7.7	8.1
12	12.5	12.0	12.3	11.5	11.0	11.4	10.2	9.4	9.9	8.2	7.5	7.8
13	12.7	12.0	12.3	11.5	11.1	11.3	10.3	9.5	10.0	8.3	6.3	7.6
14	12.3	11.8	12.1	12.1	10.9	11.3	10.2	9.6	10.0	8.2	7.5	7.8
15	12.4	11.8	12.0	11.3	10.7	10.9	10.0	9.6	9.8	7.9	7.5	7.7
16	12.1	11.1	11.8	11.1	10.6	10.7	10.0	9.6	9.8	7.6	7.0	7.4
17	12.1	11.5	11.8	11.3	10.5	10.7	10.3	9.8	10.0	7.3	6.4	6.9
18	12.1	11.5	11.8	11.2	10.6	10.9	10.6	9.9	10.2	7.5	6.4	7.0
19	12.3	11.6	11.9	11.5	10.7	11.1	10.6	10.0	10.4	7.1	6.3	6.6
20	12.0	11.5	11.7	11.7	10.4	10.9	10.6	9.3	10.4	7.1	5.8	6.4
21	12.0	11.2	11.6	11.0	7.6	10.3	10.6	9.7	10.3	7.3	6.3	6.6
22	11.7	11.3	11.5	11.3	10.3	10.9	10.4	9.0	10.1	7.0	6.1	6.6
23	11.5	11.0	11.3	12.1	10.9	11.4	10.5	9.0	9.8	7.1	6.1	6.5
24	12.1	10.8	11.1	12.5	11.6	12.2	9.9	8.8	9.5	7.2	6.0	6.6
25	11.8	10.8	11.1	12.4	8.9	11.9	9.6	8.5	9.1	7.4	6.2	6.8
26	11.7	10.8	11.2	12.2	11.4	11.9	9.2	8.2	8.8	7.8	6.5	7.1
27	12.0	10.8	11.2	12.2	11.5	11.9	---	---	---	8.3	6.9	7.6
28	11.8	11.0	11.3	12.2	11.4	11.9	---	---	---	8.7	7.0	7.9
29	11.6	10.9	11.2	12.1	10.3	11.7	---	---	---	9.3	6.9	8.3
30	---	---	---	11.8	10.8	11.5	---	---	---	9.2	7.3	8.2
31	---	---	---	11.7	11.0	11.4	---	---	---	8.2	7.3	7.8
MONTH	12.8	10.8	11.9	13.1	7.6	11.3	11.1	8.2	10.0	9.9	5.8	7.7

01467030 DELAWARE RIVER AT TORRESDALE INTAKE AT PHILADELPHIA, PA--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	8.2	6.3	7.4	5.7	3.1	4.5	---	---	---	6.8	4.5	5.2
2	8.3	6.1	7.4	7.1	3.3	4.8	---	---	---	7.4	4.0	5.3
3	7.7	6.4	7.1	5.2	3.5	4.3	---	---	---	7.0	4.2	5.4
4	7.2	5.8	6.5	4.6	2.5	3.6	---	---	---	7.3	4.5	5.7
5	6.8	5.4	6.1	5.3	2.8	3.7	---	---	---	6.6	3.7	5.7
6	7.1	5.1	5.9	5.0	3.0	3.9	5.3	4.2	4.9	6.4	3.5	5.6
7	6.3	4.3	5.6	6.2	3.4	4.4	5.5	4.1	4.7	6.3	4.1	5.6
8	6.2	4.1	5.2	6.6	3.3	5.3	5.4	3.3	4.5	6.4	4.0	5.5
9	6.7	5.1	5.8	6.5	3.5	5.3	5.5	3.4	4.6	6.7	4.0	5.7
10	7.0	4.9	5.9	6.3	2.3	4.9	5.6	3.1	4.7	6.8	4.6	5.8
11	7.2	4.8	6.4	5.8	2.7	4.7	6.2	3.6	4.9	6.9	4.1	5.8
12	8.0	4.7	6.8	5.7	2.8	4.7	6.2	3.3	5.0	6.7	4.2	5.6
13	8.4	5.2	7.4	6.1	3.1	4.9	6.5	3.6	5.2	6.1	3.7	5.1
14	8.4	6.0	7.5	6.9	3.7	5.2	7.0	3.7	5.5	5.9	4.2	4.9
15	7.9	6.1	7.3	7.8	3.9	5.7	6.8	4.7	5.5	5.2	4.0	4.5
16	7.6	5.9	7.0	7.4	5.0	6.1	6.8	3.8	5.4	6.1	3.5	4.7
17	7.8	5.8	6.9	6.3	4.7	5.5	6.5	4.3	5.4	6.2	4.1	5.1
18	8.2	5.4	6.9	6.0	3.4	5.1	6.8	4.6	5.6	5.7	4.3	5.1
19	7.6	6.0	6.9	5.7	3.7	5.0	6.5	4.5	5.4	5.4	4.0	4.9
20	7.9	5.8	6.8	6.4	3.2	5.1	6.8	2.9	5.2	5.3	3.7	4.8
21	7.5	5.9	6.7	7.1	3.5	5.2	6.8	2.6	5.1	5.1	4.3	4.8
22	7.4	5.6	6.4	7.1	3.8	5.4	6.3	3.2	5.0	4.8	4.0	4.3
23	7.9	5.6	6.5	5.5	3.4	5.1	6.5	2.7	5.0	4.9	3.3	4.2
24	8.3	5.4	6.7	5.4	3.7	4.6	7.0	3.2	5.2	5.3	2.5	4.5
25	8.1	5.3	6.7	5.3	2.4	4.3	6.8	3.5	5.5	5.2	1.9	4.1
26	7.2	4.9	6.5	5.5	2.2	4.4	6.7	3.2	5.4	5.5	2.2	4.3
27	6.8	3.8	5.8	5.7	2.9	4.7	6.7	3.0	5.2	6.2	3.7	4.9
28	6.8	4.2	5.6	6.0	3.3	5.1	6.7	2.8	4.9	6.5	3.1	5.0
29	6.2	3.5	5.3	5.9	3.6	4.9	6.3	3.1	4.8	7.4	3.9	5.6
30	6.0	3.7	4.8	---	---	---	6.2	3.1	4.6	7.1	4.5	5.7
31	---	---	---	---	---	---	6.8	3.9	4.9	---	---	---
MONTH	8.4	3.5	6.5	7.8	2.2	4.8	7.0	2.6	5.1	7.4	1.9	5.1

01467036 PENNYPACK CREEK TRIBUTARY AT HATBORO, PA

LOCATION.--Lat 40°10'51", long 75°06'45", Montgomery County, Hydrologic Unit 02040202, on left bank 15 ft (5 m) upstream from Moreland Avenue, 0.5 mi (0.8 km) upstream from confluence with Pennypack Creek, at Hatboro.

DRAINAGE AREA.--4.36 mi^2 (11.29 km^2).

PERIOD OF RECORD.--August 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 220 ft (67 m), from topographic map.

REMARKS.--Records fair. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,120 ft^3/s (31.7 m^3/s) Aug. 5, 1980, gage height, 8.23 ft (2.509 m); no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 350 ft^3/s (9.91 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 1	1315	451	12.8	6.13	1.868	July 29	1700	559	15.8	6.66	2.030
Oct. 5	1715	373	10.6	5.71	1.740	*Aug. 5	2230	*1,120	31.7	*8.23	2.509

Minimum discharge, 0.19 ft^3/s (0.005 m^3/s) many days in Sept., gage height, 1.69 ft (0.515 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	2.2	2.8	2.2	2.0	1.7	55	4.7	1.6	2.0	4.4	.30
2	7.6	2.4	2.8	2.0	2.0	1.7	16	3.2	1.5	1.2	1.0	.44
3	9.9	20	2.7	1.8	1.9	1.6	7.7	3.0	3.4	1.0	2.0	.34
4	5.2	2.8	2.5	1.7	2.0	1.6	20	2.7	1.7	.79	1.7	.34
5	28	2.5	2.5	2.0	1.9	2.0	7.5	2.7	1.5	8.6	110	.30
6	6.6	2.4	4.0	1.9	1.9	1.5	5.9	2.7	1.3	1.7	11	1.7
7	5.4	2.4	3.5	1.9	1.9	1.5	5.4	2.7	1.5	1.1	1.6	.26
8	4.7	2.4	2.5	1.7	1.9	2.8	5.1	7.2	2.5	.90	1.1	.34
9	16	2.3	2.3	1.6	1.7	2.0	46	2.7	3.0	.90	.89	.34
10	47	5.0	2.5	1.6	1.7	3.6	24	2.4	2.0	2.1	.81	.34
11	7.2	15	2.5	21	1.7	4.7	7.5	2.7	1.8	.90	.97	.30
12	6.4	10	2.1	8.4	1.7	1.9	6.4	4.0	1.6	.79	7.2	.30
13	4.7	3.0	5.1	3.0	1.6	4.4	5.6	13	1.5	.69	.81	.26
14	3.8	3.5	2.2	2.5	1.6	16	6.6	2.8	1.6	.69	.50	.22
15	3.6	2.5	2.1	2.3	1.7	6.4	5.9	2.2	2.0	.69	.57	4.2
16	3.4	2.4	2.4	2.2	4.4	4.0	4.9	2.1	2.5	1.3	.39	.34
17	3.0	2.4	2.7	2.2	1.7	3.6	4.2	2.1	2.0	1.0	.34	.39
18	2.8	2.4	2.4	8.0	1.5	5.4	4.2	4.9	1.8	.79	.63	10
19	2.7	2.4	2.4	5.4	1.6	3.0	4.0	2.5	1.6	.79	.50	.34
20	2.7	2.3	2.4	2.7	1.6	2.8	3.8	2.1	1.6	.69	.57	.22
21	2.5	2.2	2.4	2.5	1.6	49	3.6	6.4	1.6	.79	.57	.22
22	2.7	2.1	2.7	2.8	7.5	5.9	3.8	2.4	1.5	2.4	.44	.26
23	3.2	2.1	2.8	2.7	2.8	4.4	3.6	2.1	1.5	1.3	.39	.26
24	3.6	2.1	3.2	2.4	1.9	9.9	3.2	2.0	1.6	.69	.30	.26
25	2.8	2.1	8.3	2.2	1.7	25	3.2	1.9	1.5	.69	.34	1.6
26	2.7	32	3.0	2.1	1.7	4.9	2.8	1.6	1.5	.59	.44	1.6
27	2.5	3.6	2.7	2.1	1.7	4.2	4.7	1.6	1.5	.59	.50	.22
28	3.2	2.8	2.5	2.1	1.7	4.0	12	1.6	1.6	.69	.50	.22
29	2.4	2.7	2.4	2.0	1.6	12	5.4	1.6	2.0	39	.50	.44
30	2.2	2.7	2.2	2.0	---	5.1	3.6	1.6	3.0	1.5	.39	.30
31	2.4	---	2.2	2.0	---	44	---	2.1	---	.90	.81	---
TOTAL	255.9	144.7	88.8	101.0	60.2	240.6	291.6	97.3	55.3	77.76	152.16	26.65
MEAN	8.25	4.82	2.86	3.26	2.08	7.76	9.72	3.14	1.84	2.51	4.91	.89
MAX	55	32	8.3	21	7.5	49	55	13	3.4	39	110	10
MIN	2.2	2.1	2.1	1.6	1.5	1.5	2.8	1.6	1.3	.59	.30	.22
CFSM	1.89	1.11	.66	.75	.48	1.78	2.23	.72	.42	.58	1.13	.20
IN.	2.18	1.23	.76	.86	.51	2.05	2.49	.83	.47	.66	1.30	.23

CAL YR 1979 TOTAL 2958.22 MEAN 8.10 MAX 179 MIN .44 CFSM 1.86 IN 25.23
WTR YR 1980 TOTAL 1591.97 MEAN 4.35 MAX 110 MIN .22 CFSM 1.00 IN 13.58

01467042 PENNYPACK CREEK AT PINE ROAD, PHILADELPHIA, PA

LOCATION.--Lat 40°05'23", long 75°04'10", Philadelphia County, Hydrologic Unit 02040202, on right bank 20 ft (6 m) below Pine Road, 300 ft (91 m) upstream from Stream "A" at north city limits of Philadelphia.

DRAINAGE AREA.--37.9 mi^2 (98.2 km^2).

PERIOD OF RECORD.--August 1964 to September 1970, July 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 80.41 ft (24.509 m) National Geodetic Vertical Datum of 1929. Prior to Feb. 26, 1976, at site 35 ft (11 m) upstream at same datum.

REMARKS.--Records fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--12 years (Water years 1965-70, 1975-80), 63.9 ft^3/s (1.810 m^3/s), 22.89 in/yr (581 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,770 ft^3/s (107 m^3/s) Dec. 21, 1973, gage height, 10.02 ft (3.054 m), from rating curve extended above 720 ft^3/s (20.4 m^3/s) on basis of step-backwater analysis; minimum, 5.2 ft^3/s (0.15 m^3/s) July 26, 27, 1966, gage height, 2.47 ft (0.753 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 28, 1971, reached a stage of 11.08 ft (3.377 m), from floodmark, discharge, 5,160 ft^3/s (146 m^3/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft^3/s (28.3 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 1	1730	1,610	45.6	7.06	2.152
Mar. 21	1715	1,380	39.1	6.60	2.012
Mar. 25	0330	1,200	34.0	6.22	1.896
Mar. 31	1445	1,030	29.2	5.84	1.780
Apr. 1	1715	1,140	32.3	6.07	1.850
Apr. 9	1230	1,220	34.6	6.26	1.908
July 29	unknown	*1,690	47.9	*7.22	2.201
Aug. 5	unknown	unknown		unknown	
Sept. 18	0400	1,010	28.6	5.79	1.765

Minimum daily discharge, 15 ft^3/s (0.42 m^3/s) several days July to September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	489	47	41	36	39	32	620	97	38	24	35	15
2	146	48	39	36	36	33	300	57	35	22	20	16
3	127	283	39	36	35	33	189	54	41	35	25	16
4	97	72	39	36	35	32	307	47	36	23	20	16
5	222	51	39	36	35	35	167	51	33	39	500	16
6	127	48	44	36	35	34	137	41	31	99	600	27
7	90	47	62	36	34	33	125	48	30	16	34	15
8	77	44	38	36	35	35	117	109	30	16	27	16
9	109	41	38	35	35	38	467	49	32	16	23	16
10	578	117	38	35	35	47	355	39	41	33	21	15
11	167	109	38	170	35	122	146	46	33	16	23	15
12	137	185	38	208	35	36	127	60	30	17	117	16
13	120	68	97	47	34	48	117	160	30	17	23	16
14	99	60	51	41	34	238	125	51	29	17	21	16
15	92	51	38	39	35	112	125	45	30	17	21	48
16	86	48	38	38	64	72	104	38	38	52	23	15
17	77	47	41	38	35	57	92	38	30	22	18	16
18	72	44	36	77	33	114	86	72	29	17	18	254
19	64	44	38	112	34	51	81	48	29	17	19	19
20	64	41	36	44	34	47	73	45	29	18	18	15
21	60	41	36	39	33	527	72	98	27	18	18	15
22	60	39	39	44	48	167	68	48	26	109	18	15
23	64	39	44	48	64	99	60	38	26	54	18	15
24	92	39	54	38	36	97	57	36	27	15	16	16
25	64	39	133	38	35	407	57	36	26	17	16	27
26	58	279	47	38	34	114	54	35	26	18	16	23
27	54	92	39	36	34	99	125	34	25	18	16	15
28	72	54	38	36	34	90	197	35	24	17	15	16
29	60	47	38	36	33	204	104	34	25	600	15	16
30	48	44	36	36	---	122	73	34	41	50	15	15
31	48	---	36	36	---	507	---	36	---	25	19	---
TOTAL	3720	2208	1408	1597	1078	3682	4727	1659	927	1474	1788	771
MEAN	120	73.6	45.4	51.5	37.2	119	158	53.5	30.9	47.5	57.7	25.7
MAX	578	283	133	208	64	527	620	160	41	600	600	254
MIN	48	39	36	35	33	32	54	34	24	15	15	15
CFSM	3.17	1.94	1.20	1.36	.98	3.14	4.17	1.41	.82	1.25	1.52	.68
IN.	3.65	2.17	1.38	1.57	1.06	3.61	4.64	1.63	.91	1.45	1.75	.76

CAL YR 1979 TOTAL 39021 MEAN 107 MAX 1830 MIN 27 CFSM 2.82 IN 38.30
WTR YR 1980 TOTAL 25039 MEAN 68.4 MAX 620 MIN 15 CFSM 1.81 IN 24.58

01467043 STREAM 'A' AT PHILADELPHIA, PA

LOCATION.--Lat 40°05'27", long 75°03'50", Philadelphia County, Hydrologic Unit 02040202, on left bank 25 ft (8 m) upstream from concrete box culvert on Bloomfield Avenue, 600 ft (180 m) upstream from mouth, at Philadelphia.

DRAINAGE AREA.--1.20 mi^2 (3.11 km^2).

PERIOD OF RECORD.--Annual maximums, water years 1965-1977. Discontinued as a crest-stage partial-record station; established as a continuous-record station Dec. 4, 1976. December 1976 to September 1980.

GAGE.--Water-stage recorder. Datum of gage is 82.58 ft (25.170 m) National Geodetic Vertical Datum of 1929. Feb. 11, 1965, to Dec. 3, 1976, crest-stage gage at site 9 ft (3 m) downstream at same datum.

REMARKS.--Records fair. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 663 ft^3/s (18.8 m^3/s) July 13, 1975, gage height, 18.03 ft (5.496 m); no flow part of many days in January and February 1977, and September 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft^3/s (1.42 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
July 3	0945	118	3.34	12.51	3.813
July 5	2120	84	2.38	11.96	3.645
July 16	1725	171	4.84	13.21	4.026
July 22	1925	45	2.12	11.81	3.600
July 29	1600	*430	12.2	*15.95	4.862
Aug. 5	1920	160	4.53	13.07	3.984
Aug. 11	2210	175	4.96	13.26	4.042
Sept. 17	2200	295	8.35	14.60	4.450

No flow Sept. 8-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	.40	.45	.22	.30	.60	12	2.1	.45	.17	.45	.03
2	1.3	.50	.45	.25	.30	.70	5.5	1.0	.51	.17	.14	.03
3	1.2	5.0	.45	.30	.30	.60	3.9	1.0	1.3	3.2	1.2	.12
4	.86	.50	.75	.30	.30	.60	7.9	.86	.34	.17	.14	.03
5	3.6	.40	.45	.30	.30	1.0	3.8	.75	.34	2.7	12	.03
6	.75	.50	.34	.25	.30	.70	3.3	.86	.39	.39	.66	.19
7	.75	.45	.45	.35	.30	.60	3.1	1.0	.34	.12	.22	.03
8	.66	.39	.39	.35	.30	3.9	2.9	2.5	.51	.11	.17	.00
9	.66	.45	.29	.30	.30	1.6	11	.75	1.3	.09	.14	.00
10	10	2.3	.29	.25	.30	4.1	3.2	.75	.58	.11	.11	.00
11	1.4	3.7	.29	7.0	.35	2.7	2.2	1.0	.25	.08	4.0	.00
12	1.9	1.8	.29	2.0	.35	.86	2.1	1.8	.25	.05	.51	.00
13	1.0	.58	2.2	.90	.35	4.6	1.8	1.8	.25	.04	.14	.00
14	.86	.66	.34	.60	.35	5.9	2.5	.45	.29	.04	.12	.63
15	.86	.51	.25	.50	.34	2.0	2.1	.60	1.1	.03	.22	1.3
16	.86	.51	.39	.45	1.9	.90	1.8	.55	.58	4.2	.09	.03
17	.86	.51	.51	.40	1.5	1.0	1.6	.50	.29	.39	.09	17
18	.70	.51	.25	4.0	.75	1.5	1.5	1.5	.25	.19	.09	.58
19	.60	.51	.34	3.0	.58	.60	1.5	.75	.25	.14	.09	.11
20	.50	.45	.29	.60	.39	.51	1.5	.45	.25	.14	.08	.08
21	.40	.45	.29	.50	.39	11	1.3	2.2	.22	.14	.07	.06
22	.35	.45	.51	1.0	6.5	2.4	1.3	.51	.19	2.7	.06	.05
23	.50	.45	.45	.80	1.0	1.4	1.2	.45	.19	2.2	.05	.05
24	1.0	.45	2.0	.60	.70	2.6	1.0	.45	.19	.14	.05	.05
25	.50	.58	.39	.55	.60	7.3	1.0	.45	.22	.09	.04	.45
26	.60	2.8	.29	.50	.60	1.9	1.0	.39	.19	.08	.04	.12
27	.40	.58	.25	.45	.70	1.7	2.4	.34	.17	.08	.04	.05
28	.80	.45	.25	.40	.80	1.6	4.2	.34	.14	.08	.04	.04
29	.50	.45	.25	.35	.70	6.6	2.2	.34	1.2	20	.04	.05
30	.40	.45	.22	.30	---	2.3	1.5	.34	2.1	.39	.04	.05
31	.40	---	.22	.30	---	11	---	1.5	---	.39	.08	---
TOTAL	40.47	27.74	14.58	28.07	21.85	84.77	92.3	28.28	14.63	38.82	21.21	21.16
MEAN	1.31	.92	.47	.91	.75	2.73	3.08	.91	.49	1.25	.68	.71
MAX	10	5.0	2.2	7.0	6.5	11	12	2.5	2.1	20	12	17
MIN	.35	.39	.22	.22	.30	.51	1.0	.34	.14	.03	.04	.00
CFSM	1.09	.77	.39	.76	.63	2.28	2.57	.76	.41	1.04	.57	.59
IN.	1.25	.86	.45	.87	.68	2.63	2.86	.88	.45	1.20	.66	.66

CAL YR 1979 TOTAL 607.87 MEAN 1.67 MAX 29 MIN .22 CFSM 1.39 IN 18.83
WTR YR 1980 TOTAL 433.88 MEAN 1.19 MAX 20 MIN .00 CFSM .99 IN 13.44

01467048 PENNYPACK CREEK AT LOWER RHAWN STREET BRIDGE, PHILADELPHIA, PA

LOCATION.--Lat 49°03'00", long 75°01'59", Philadelphia County, Hydrologic Unit 02040202, on left bank at downstream side of footbridge pier, 400 ft (122 m) downstream from Lower Rhawn Street Bridge, 0.8 mi (1.3 km) upstream from Wooden Bridge Run, in Philadelphia.

DRAINAGE AREA.--49.8 mi^2 (129 km^2).

PERIOD OF RECORD.--June 1965 to September 1970, July 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 21.27 ft (6.483 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for period of missing record June 5 to July 10, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--11 years (Water years 1966-70, 1975-80), 86.8 ft^3/s (2.458 m^3/s), 23.66 in/yr (601 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,160 ft^3/s (146 m^3/s) Aug. 27, 1967, gage height, 10.54 ft (3.213 m); minimum, 6.0 ft^3/s (0.17 m^3/s) Oct. 11, 1966, gage height, 1.97 ft (0.600 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,250 ft^3/s (35.4 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 1	1845	1,960	55.5	6.07	1.850	Apr. 9	1330	1,560	44.2	5.56	1.695
Mar. 21	1645	2,120	60.0	6.27	1.911	July 16	1745	1,490	42.2	5.46	1.664
Mar. 25	0515	1,540	43.6	5.53	1.686	July 29	1700	*3,180	90.1	*7.48	2.280
Mar. 31	1730	1,490	42.2	5.46	1.664	Aug. 5	2200	2,810	79.6	7.11	2.167
Apr. 1	1830	2,440	40.8	5.39	1.643	Sept. 18	0115	2,050	58.1	6.19	1.887

Minimum discharge, 14 ft^3/s (0.40 m^3/s) Sept. 14, gage height, 2.09 ft (0.637 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	718	51	51	48	45	40	912	151	54	35	45	23
2	239	53	49	48	43	39	495	68	43	30	27	23
3	168	499	49	48	41	45	327	58	54	45	33	26
4	99	78	49	46	40	39	529	54	54	30	27	18
5	280	54	49	48	39	46	285	54	39	50	404	22
6	222	53	56	49	38	40	209	53	37	150	1010	53
7	86	51	89	49	37	39	181	56	35	30	48	20
8	78	51	49	48	38	46	155	205	35	28	33	17
9	110	51	48	46	39	51	704	54	38	26	29	17
10	830	151	48	45	39	65	569	51	50	50	27	17
11	285	139	48	222	38	230	244	53	40	28	27	17
12	197	331	48	446	37	46	193	89	37	26	181	17
13	168	75	136	56	36	78	168	280	35	24	30	17
14	110	68	75	53	36	499	193	54	35	25	26	17
15	89	56	49	51	36	181	197	49	35	24	27	70
16	83	56	49	49	75	113	125	48	50	86	29	21
17	75	54	56	48	45	86	106	46	40	42	23	18
18	68	54	46	68	37	222	96	106	35	26	21	508
19	61	54	48	252	38	86	89	51	33	23	23	27
20	58	54	46	54	37	68	83	49	33	23	23	20
21	56	53	46	51	37	835	78	181	31	21	22	18
22	58	51	53	56	61	311	72	53	31	49	21	18
23	58	51	56	65	75	125	68	46	31	136	21	19
24	106	51	68	49	45	121	61	45	31	30	20	17
25	56	51	239	49	43	659	61	45	31	24	20	31
26	54	455	61	48	40	155	56	43	31	23	20	507
27	54	136	51	46	39	113	139	42	30	22	19	20
28	68	58	51	46	40	96	335	43	30	21	19	17
29	58	54	49	46	39	378	181	42	35	850	19	17
30	51	53	49	45	---	197	86	42	55	125	19	17
31	51	---	48	43	---	737	---	48	---	31	20	---
TOTAL	4694	3046	1909	2318	1233	5786	6997	2259	1148	2133	2313	1649
MEAN	151	102	61.6	74.8	42.5	187	233	72.9	38.3	68.8	74.6	55.0
MAX	830	499	239	446	75	835	912	280	55	850	1010	508
MIN	51	51	46	43	36	39	56	42	30	21	19	17
CFSM	3.03	2.05	1.24	1.50	.85	3.76	4.68	1.46	.77	1.38	1.50	1.10
IN.	3.51	2.28	1.43	1.73	.92	4.32	5.23	1.69	.86	1.59	1.73	1.23

CAL YR 1979 TOTAL 53575 MEAN 147 MAX 2900 MIN 32 CFSM 2.95 IN 40.02
WTR YR 1980 TOTAL 35485 MEAN 97.0 MAX 1010 MIN 17 CFSM 1.95 IN 26.51

01467050 WOODEN BRIDGE RUN AT PHILADELPHIA, PA

LOCATION.--Lat 40°03'19", long 75°01'22", Philadelphia County, Hydrologic Unit 02040203, on left bank 200 ft (61 m) upstream from Penn Central Railroad bridge, 600 ft (183 m) southeast of Holme Avenue and 1,500 ft (457 m) upstream from mouth in Philadelphia.

DRAINAGE AREA.--3.35 mi^2 (8.68 km^2).

PERIOD OF RECORD.--June 1965 to September 1970, October 1974 to current year.

REVISED RECORDS.--WDR PA-76-1: 1974.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 29.69 ft (9.050 m) National Geodetic Vertical Datum of 1929. Prior to July 6, 1966, water-stage recorder at site 300 ft (91 m) downstream at same datum.

REMARKS.--Records good. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--11 years (Water years 1966-70, 1975-80), 5.73 ft^3/s (0.162 m^3/s), 23.24 in/yr (590 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,860 ft^3/s (52.7 m^3/s) Aug. 27, 1967, gage height, 12.20 ft (3.719 m), from rating curve extended above 300 ft^3/s (8.5 m^3/s) on basis of flow through culvert at gage height 11.96 ft (3.645 m); minimum, 0.10 ft^3/s (0.003 m^3/s) Aug. 14, 15, 22, 1966; minimum gage height, 3.02 ft (0.920 m) July 18, 19, 21, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft^3/s (8.50 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
July 16	1830	549	15.5	7.05	2.149
*July 29	1900	*1,160	32.9	*9.34	2.847
Aug. 5	2145	1,030	29.2	8.82	2.688
Aug. 12	0300	384	10.9	6.39	1.948
Sept. 18	0245	764	21.6	7.85	2.393

Minimum discharge, 0.55 ft^3/s (0.016 m^3/s) July 12, 13, 14; minimum gage height, 3.22 ft (0.981 m) Sept. 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	1.6	1.5	.96	1.8	1.4	72	8.1	2.7	1.1	2.9	1.2
2	4.5	1.8	1.3	1.1	1.6	1.5	9.0	3.1	2.2	1.2	1.9	2.1
3	4.8	27	1.3	1.4	1.5	1.4	4.5	2.7	4.8	4.6	2.7	2.7
4	2.2	2.1	1.5	1.4	1.6	1.3	36	2.3	2.2	1.1	2.3	1.4
5	9.0	1.6	1.5	1.5	1.6	2.7	4.6	2.3	1.8	14	141	2.1
6	3.4	1.7	6.0	1.4	1.6	1.4	3.2	2.4	1.9	2.5	33	14
7	1.7	1.6	3.7	1.8	1.6	1.3	2.7	3.8	1.8	1.2	2.8	1.6
8	1.4	1.6	1.6	1.8	1.6	3.8	2.5	11	3.2	1.2	2.3	1.7
9	7.8	1.6	1.5	1.5	1.6	1.8	104	2.4	4.3	1.1	2.2	1.8
10	63	4.8	1.5	1.4	1.6	13	14	2.1	3.7	1.3	2.0	1.4
11	5.6	17	1.5	42	1.7	17	3.5	2.8	1.5	.96	2.0	.98
12	7.0	9.7	1.6	16	1.8	1.6	2.8	7.0	1.4	.70	22	1.0
13	4.1	2.3	11	2.3	1.8	21	2.5	15	1.3	.60	1.9	1.0
14	2.2	2.5	2.5	2.1	1.9	32	6.8	2.4	1.4	1.1	1.7	1.1
15	1.9	1.8	1.6	1.9	2.1	4.1	3.4	2.4	2.7	1.7	2.4	12
16	1.8	1.8	2.1	1.8	8.4	2.1	2.3	2.3	5.4	34	1.8	1.1
17	1.8	1.6	3.7	1.7	1.4	2.7	2.1	2.2	1.3	3.2	1.7	1.0
18	1.7	1.5	1.5	16	1.2	6.8	2.1	8.1	1.3	1.6	1.8	72
19	1.6	1.6	1.5	8.4	1.2	1.8	1.9	2.7	1.2	1.1	1.7	1.7
20	1.5	1.6	1.7	1.9	1.3	1.7	1.9	2.3	1.3	1.3	1.6	1.3
21	1.3	1.5	1.7	1.8	1.4	65	2.2	13	1.1	1.3	1.6	1.2
22	1.3	1.2	3.1	5.8	9.0	7.0	2.4	2.4	.96	12	1.5	1.3
23	1.6	1.1	2.7	2.5	2.5	3.4	2.4	2.2	1.1	7.2	1.4	1.2
24	4.0	.96	3.5	1.8	1.5	7.3	2.4	2.1	1.1	1.7	1.3	.81
25	1.7	.96	13	1.8	1.3	39	2.4	1.9	1.2	1.2	1.4	4.3
26	1.7	17	1.9	1.8	1.4	3.5	2.2	1.8	1.2	1.0	1.5	1.6
27	1.5	2.2	1.6	1.7	1.6	2.4	11	1.9	1.2	1.0	1.5	.81
28	3.1	1.8	1.5	1.7	1.7	2.1	20	1.9	.96	1.1	1.5	.75
29	1.6	1.6	1.4	1.7	1.5	27	9.3	1.9	2.3	161	1.5	.75
30	1.6	1.5	1.2	1.7	---	5.0	4.3	1.9	11	4.8	1.4	.88
31	1.6	---	.96	1.8	---	48	---	3.1	---	2.1	1.3	---
TOTAL	173.0	116.62	82.66	132.46	60.8	330.1	340.4	121.5	69.52	269.96	247.6	136.78
MEAN	5.58	3.89	2.67	4.27	2.10	10.6	11.3	3.92	2.32	8.71	7.99	4.56
MAX	63	27	13	42	9.0	65	104	15	11	161	141	72
MIN	1.3	.96	.96	.96	1.2	1.3	1.9	1.8	.96	.60	1.3	.75
CFSM	1.67	1.16	.80	1.28	.63	3.16	3.37	1.17	.69	2.60	2.39	1.36
IN.	1.92	1.29	.92	1.47	.67	3.66	3.78	1.35	.77	3.00	2.75	1.52

CAL YR 1979 TOTAL 3255.38 MEAN 8.92 MAX 222 MIN .96 CFSM 2.66 IN 36.14
WTR YR 1980 TOTAL 2081.40 MEAN 5.69 MAX 161 MIN .60 CFSM 1.70 IN 23.11

01467086 TACONY CREEK ABOVE ADAMS AVENUE, PHILADELPHIA, PA

LOCATION.--Lat 40°02'33", long 75°06'47", Philadelphia County, Hydrologic Unit 02040203, on left bank 20 ft (6 m) upstream from dam, 120 ft (37 m) upstream from Adams Avenue bridge in Philadelphia.

DRAINAGE AREA.--16.7 mi² (43.2 km²).

PERIOD OF RECORD.--October 1965 to September 1970, July 1974 to current year.

REVISED RECORDS.--WDR PA-76-1: 1974.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 61.11 ft (18.626 m) National Geodetic Vertical Datum of 1929. Prior to June 1972 recording gage at site 1,600 ft (490 m) upstream at same datum.

REMARKS.--Records good except for periods of missing record Jan. 17 to Feb. 29, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--11 years (Water years 1966-70, 1975-80), 26.4 ft³/s (0.748 m³/s), 21.49 in/yr (546 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,550 ft³/s (129 m³/s) Aug. 27, 1967, gage height, 13.19 ft (4.020 m), from rating curve extended above 350 ft³/s (9.91 m³/s) on basis of slope-area measurements at gage height 9.06 ft (2.761 m); minimum, 1.8 ft³/s (0.051 m³/s) Sept. 12, 1966, gage height, 2.82 ft (0.860 m), at upstream site.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,100 ft³/s (31.2 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 1	1330	1,240	35.1	5.83	1.777	Sept. 18	0515	*2,120	60.0	*7.41	2.259
Aug. 5	2100	1,520	43.0	6.36	1.939						

Minimum discharge, 3.3 ft³/s (0.093 m³/s) many days in August and September, gage height, 2.15 ft (0.655 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	144	18	16	14	11	10	171	48	25	8.2	13	4.4
2	30	19	15	15	11	10	77	27	15	7.3	7.2	4.5
3	34	125	15	15	11	10	55	29	20	25	11	7.8
4	21	21	16	14	11	10	114	24	14	8.3	7.6	4.3
5	77	19	15	16	10	16	52	23	12	67	144	4.9
6	26	18	25	15	10	10	45	21	11	16	30	25
7	20	18	25	15	11	10	43	26	12	7.2	8.1	4.6
8	19	17	15	15	11	16	42	52	17	6.8	6.7	4.2
9	49	17	16	14	11	13	169	21	12	7.0	7.0	4.3
10	178	41	17	14	10	48	90	20	27	6.8	5.9	4.6
11	37	49	16	94	10	47	48	23	12	6.2	12	4.1
12	41	50	16	52	11	11	43	45	11	6.7	50	4.3
13	29	20	47	15	11	48	42	60	10	5.9	6.7	4.0
14	25	20	18	15	12	84	52	22	10	5.4	6.2	4.4
15	24	18	15	13	12	24	43	21	12	5.3	10	33
16	23	18	16	13	40	17	35	20	26	70	6.5	5.1
17	22	17	20	12	15	19	34	19	11	18	5.5	5.4
18	22	18	15	50	13	39	32	40	10	8.1	5.6	196
19	21	18	17	25	12	16	32	23	10	6.7	6.2	6.6
20	21	17	15	13	12	15	30	21	9.3	7.0	6.0	5.7
21	21	17	15	12	12	204	29	48	9.1	7.5	6.0	4.9
22	20	17	20	25	50	39	29	20	9.3	79	6.3	5.0
23	21	17	17	13	15	26	27	19	8.4	44	6.1	4.8
24	31	18	20	12	12	39	27	15	8.2	10	4.9	4.7
25	20	17	51	12	11	129	26	14	8.4	8.0	4.8	19
26	19	111	16	12	10	29	26	14	8.5	7.6	4.3	7.7
27	18	21	16	12	10	26	45	14	8.1	8.4	4.5	5.2
28	26	18	15	12	10	24	104	14	7.2	10	4.5	5.5
29	18	17	15	12	10	81	50	14	8.1	120	4.5	5.8
30	17	16	15	11	---	30	37	18	41	30	4.6	6.0
31	18	---	14	11	---	178	---	22	---	7.6	7.6	---
TOTAL	1092	827	584	593	395	1278	1649	797	402.6	630.9	413.3	405.8
MEAN	35.2	27.6	18.8	19.1	13.6	41.2	55.0	25.7	13.4	20.4	13.3	13.5
MAX	178	125	51	94	50	204	171	60	41	120	144	196
MIN	17	16	14	11	10	10	26	14	7.2	5.3	4.3	4.0
CFSM	2.11	1.65	1.13	1.14	.81	2.47	3.29	1.54	.80	1.22	.80	.81
IN.	2.43	1.84	1.30	1.32	.88	2.85	3.67	1.78	.90	1.41	.92	.90

CAL YR 1979 TOTAL 13984.0 MEAN 38.3 MAX 552 MIN 10 CFSM 2.29 IN 31.15
WTR YR 1980 TOTAL 9067.6 MEAN 24.8 MAX 204 MIN 4.0 CFSM 1.49 IN 20.20

01467089 FRANKFORD CREEK AT TORRESDALE AVENUE, PHILADELPHIA, PA

LOCATION.--Lat 40°00'25", long 75°05'33", Philadelphia County, Hydrologic Unit 02040203, on left bank at Worrell Avenue, 400 ft (122 m) upstream from Torresdale Avenue in Philadelphia.

DRAINAGE AREA.--33.8 mi^2 (87.5 km^2).

PERIOD OF RECORD.--October 1965 to September 1970, October 1974 to current year.

REVISED RECORDS.--WDR PA-67: 1966(M).

GAGE.--Water-stage recorder, concrete control, and crest-stage gage. Datum of gage is 1.08 ft (0.329 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--11 years (Water years 1966-70, 1975-80), 58.2 ft^3/s (1.648 m^3/s), 23.38 in/yr (594 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,900 ft^3/s (252 m^3/s) Sept. 18, 1980, gage height, 13.72 ft (4.182 m), from rating curve extended above 1,300 ft^3/s (36.8 m^3/s); minimum, 0.11 ft^3/s (0.003 m^3/s) Sept. 7, 1978, gage height, 2.43 ft (0.741 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft^3/s (85.0 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
July 16	1800	4,840	137	10.54	3.213	Aug. 12	0130	3,660	104	9.43	2.874
July 22	1945	4,770	135	10.47	3.191	Sept. 18	0145	*8,900	252	*13.72	4.182
Aug. 5	2130	5,530	157	11.13	3.392						

Minimum discharge, 8.4 ft^3/s (0.24 m^3/s) Sept. 30, gage height, 3.23 ft (0.985 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	360	18	19	20	19	13	412	79	32	16	36	13
2	51	24	19	22	16	14	118	47	23	16	16	13
3	87	358	19	21	16	14	74	30	57	29	25	15
4	58	29	20	18	15	15	277	27	20	18	16	12
5	255	32	20	20	15	25	101	27	17	159	500	13
6	57	32	55	19	14	17	65	22	18	44	61	24
7	38	22	42	19	16	15	55	44	19	17	17	12
8	19	26	19	19	16	30	51	108	51	16	16	11
9	100	21	19	18	16	20	425	25	43	17	15	11
10	483	75	19	18	15	200	164	22	43	17	16	12
11	70	134	19	255	16	133	60	27	22	16	19	11
12	77	78	18	144	16	19	52	119	20	16	229	12
13	31	28	96	22	17	162	46	123	19	15	16	11
14	24	24	23	20	17	197	75	25	17	15	15	12
15	24	23	18	20	19	34	116	20	46	15	30	59
16	22	22	21	20	83	25	46	19	53	257	14	16
17	22	23	38	19	25	31	46	18	23	31	14	22
18	21	22	18	125	22	64	46	85	27	20	14	739
19	21	23	20	67	20	19	45	42	26	17	14	15
20	22	22	19	20	20	19	41	25	21	20	15	16
21	20	21	18	19	20	540	38	104	19	23	17	13
22	21	22	21	45	100	55	34	24	22	271	13	12
23	25	21	20	27	25	38	36	22	20	50	13	13
24	38	21	22	20	20	105	36	22	21	17	13	12
25	18	21	90	19	17	322	33	20	20	15	13	67
26	18	311	25	19	16	41	30	18	19	16	12	20
27	18	28	25	19	15	38	102	17	18	16	12	9.5
28	33	22	23	19	14	36	251	19	16	16	12	10
29	17	20	23	18	13	208	74	19	51	359	12	10
30	18	19	23	18	---	43	77	34	128	22	13	9.5
31	18	---	21	17	---	453	---	65	---	15	15	---
TOTAL	2086	1542	852	1146	653	2945	3026	1298	931	1591	1243	1225.0
MEAN	67.3	51.4	27.5	37.0	22.5	95.0	101	41.9	31.0	51.3	40.1	40.8
MAX	483	358	96	255	100	540	425	123	128	359	500	739
MIN	17	18	18	17	13	13	30	17	16	15	12	9.5
CFSM	1.99	1.52	.81	1.10	.67	2.81	2.99	1.24	.92	1.52	1.19	1.21
IN.	2.30	1.70	.94	1.26	.72	3.24	3.33	1.43	1.02	1.75	1.37	1.35

CAL YR 1979 TOTAL 29794.0 MEAN 81.6 MAX 1380 MIN 16 CFSM 2.41 IN 32.79
WTR YR 1980 TOTAL 18538.0 MEAN 50.7 MAX 739 MIN 9.5 CFSM 1.50 IN 20.40

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE AT PHILADELPHIA, PA

LOCATION.--Lat 39°57'11", long 75°08'05", Philadelphia County, Hydrologic Unit 02040202, at center of river on a line 200 ft (61 m) upstream of bridge from the north side of pier 12 north through channel station +14.3 to pierhead line on New Jersey side of river.

DRAINAGE AREA.--7,993 mi^2 (20,700 km^2).

PERIOD OF RECORD.--August 1949 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1963 to current year.
pH: October 1967 to current year.
WATER TEMPERATURES: November 1960 to current year.
DISSOLVED OXYGEN: November 1960 to current year.

REMARKS.--Water-quality recorder (30°57'10", 75°08'18") located at river end of pier 11 north about 100 ft (30 m) downstream from bridge. Further information on this station is given in U.S. Geological Survey Water-Supply Paper 1809-O. Interruptions in the record were due to malfunctions of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,450 micromhos Nov. 20, 1964; minimum, 65 micromhos Sept. 15, 1979.
pH: Maximum, 8.7 Oct. 14, 1979; minimum, 4.7 Dec. 29, 1978.
WATER TEMPERATURES: Maximum, 31.0°C, July 13-15, 1966; minimum, freezing point on many days during winter months.
DISSOLVED OXYGEN: Maximum, 14.1 mg/L Dec. 14, 1962; minimum, 0.0 mg/L on many days each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maxiimum, 496 micromhos Sept. 30; minimum, 68 micromhos Oct. 2.
pH: Maximum, 8.7 Oct. 14; minimum, 5.5 Mar. 24.
WATER TEMPERATURES: Maximum, 29.0°C on several days during August; minimum, 2.0°C on many days during February.
DISSOLVED OXYGEN: Maximum, 12.3 mg/L Mar. 24 and 25; minimum, 0.0 mg/L Aug. 1 and 2.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	BICARBONATE (MG/L AS HCO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)
MAY												
23...	1400	208	6.2	61	19	16	5.1	11	.7	51	42	51
SEP												
03...	1220	351	6.5	92	46	23	8.4	25	1.2	56	46	28

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE DISSOL. (MG/L AS P)	PHOSPHORUS, ORTHOPHOSPHATE DISSOL. (MG/L AS PO4)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)
MAY												
23...	26	13	3.2	117	106	.16	1.0	.100	.31	1	30	<1
SEP												
03...	53	36	.4	190	165	.26	1.6	.000	.00	--	40	<1

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE AT PHILADELPHIA, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CADMIUM DIS-SOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COBALT, DIS-SOLVED (UG/L AS CO)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)
MAY												
23...	<1	<10	<10	<3	10	<10	<10	58	6300	<10	40	<4
SEP												
03...	2	--	--	<3	--	<10	--	55	--	<10	--	4

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
MAY												
23...	33	820	.00	21	0	72	<6.0	15	350	8.5	2	.0
SEP												
03...	110	--	--	<10	--	110	<6.0	<4	--	5.2	--	--

DATE	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-AZINON, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDO-SULFAN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ETHION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
MAY											
23...	.0	0	2.1	1.8	.0	.0	.0	.0	.0	.0	.0
SEP											
03...	--	--	--	--	--	--	--	--	--	--	--

DATE	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	MALA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA-THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI-THION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PARA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PER-THANE IN BOTTOM MATERIL (UG/KG)	TRI-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
MAY											
23...	.0	.0	.0	.0	.0	.0	.0	.0	.00	.0	0
SEP											
03...	--	--	--	--	--	--	--	--	--	--	--

DATE	BENZENE TOTAL (UG/L)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L)	CHLOR-OFORM TOTAL (UG/L)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)
MAY											
23...	--	--	--	--	--	--	--	--	--	--	--
SEP											
03...	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE AT PHILADELPHIA, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	99	79	90	200	182	192	137	108	124	227	209	220
2	94	68	82	201	186	195	144	125	136	222	205	215
3	---	---	---	202	174	192	177	145	158	219	201	212
4	---	---	---	192	167	181	213	176	192	216	199	209
5	---	---	---	181	163	172	215	196	205	216	198	208
6	---	---	---	176	165	171	206	197	201	215	202	210
7	---	---	---	173	164	169	205	198	203	216	201	209
8	---	---	---	170	156	165	211	198	203	217	203	209
9	---	---	---	168	148	160	211	203	206	216	203	210
10	---	---	---	161	137	153	218	204	210	226	206	215
11	122	113	118	153	129	142	219	212	216	231	211	222
12	125	115	120	145	126	136	224	216	220	233	209	223
13	136	118	123	140	127	134	231	222	226	218	205	213
14	134	121	125	142	128	136	233	225	228	226	210	218
15	130	122	126	149	137	143	237	224	231	236	218	227
16	135	124	129	155	144	150	235	227	231	239	228	234
17	140	130	134	158	149	153	233	213	223	246	229	237
18	143	135	139	159	151	155	222	213	218	247	232	241
19	156	138	144	209	155	178	223	215	219	251	230	242
20	156	146	150	204	187	195	233	215	223	247	229	239
21	157	147	153	208	195	202	230	218	226	248	225	236
22	161	149	156	226	197	209	232	217	226	244	223	236
23	169	155	162	237	204	216	231	219	226	246	229	240
24	169	159	165	238	201	216	230	216	224	243	229	238
25	173	164	168	244	219	231	231	217	225	245	225	237
26	176	165	170	256	228	242	226	216	222	245	233	240
27	178	165	172	266	234	250	238	216	224	248	232	240
28	179	167	173	---	---	---	231	221	225	252	235	244
29	181	167	174	194	161	179	232	224	228	253	238	247
30	189	172	180	171	111	139	229	220	226	251	236	244
31	196	179	187	---	---	---	227	217	223	260	237	249
MONTH	196	68	145	266	111	178	238	108	211	260	198	228

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	259	243	253	334	304	323	157	138	149	188	174	180
2	260	244	256	342	306	325	150	133	142	182	157	173
3	265	250	259	345	315	332	144	132	137	180	139	160
4	271	249	263	359	317	341	151	135	143	155	134	143
5	280	256	268	353	319	339	146	137	140	146	130	138
6	283	259	273	349	310	333	147	138	142	145	132	140
7	284	263	277	347	310	333	146	137	141	150	134	143
8	290	268	282	349	316	337	147	140	144	152	142	149
9	292	273	286	350	320	335	160	140	148	163	145	152
10	293	277	287	356	314	338	156	141	146	161	149	156
11	299	276	291	350	305	329	151	141	147	163	155	160
12	297	273	289	324	310	---	153	138	146	170	159	164
13	301	280	293	---	---	---	149	121	134	175	168	172
14	305	292	299	---	---	---	130	117	125	178	168	174
15	318	292	305	---	---	---	132	122	127	184	172	178
16	324	295	313	---	---	---	136	124	129	191	179	184
17	321	302	312	---	---	---	142	128	135	197	185	190
18	327	301	315	---	---	---	144	135	139	198	191	195
19	332	301	318	---	---	---	147	134	140	209	193	198
20	334	307	322	---	---	---	142	131	136	212	199	205
21	338	314	328	247	228	---	142	131	136	214	202	209
22	342	312	331	224	149	180	143	135	140	213	200	207
23	347	319	334	153	116	134	150	140	145	215	200	208
24	342	317	331	124	95	107	152	141	147	228	207	217
25	341	305	326	112	96	102	155	147	152	224	211	219
26	339	302	324	121	98	110	164	151	158	225	211	219
27	352	302	331	125	112	119	169	157	162	225	212	219
28	345	306	320	138	118	124	173	163	168	231	216	223
29	342	305	328	139	123	132	179	168	172	240	220	230
30	---	---	---	136	127	131	191	170	176	240	225	234
31	---	---	---	149	128	136	---	---	---	245	230	239
MONTH	352	243	301	359	95	235	191	117	145	245	130	186

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE AT PHILADELPHIA, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	248	233	242	329	298	314	330	288	311	375	317	345
2	256	236	248	332	297	315	336	292	315	378	307	343
3	258	242	252	331	298	317	336	291	315	378	315	342
4	262	246	254	339	300	320	338	292	315	393	315	349
5	263	244	255	335	299	318	333	297	316	396	335	361
6	266	242	257	329	291	314	332	270	294	401	332	365
7	267	249	260	335	294	314	312	269	288	404	323	363
8	280	252	266	332	295	313	313	269	289	401	335	372
9	280	252	267	324	295	312	311	275	290	415	331	376
10	281	264	272	330	297	315	314	269	293	425	338	378
11	281	267	275	329	302	318	320	274	299	427	345	385
12	285	270	278	337	299	322	317	279	298	428	346	384
13	288	269	280	337	297	320	320	280	300	431	355	393
14	294	272	285	341	299	322	324	287	306	437	352	398
15	294	272	286	337	301	323	325	289	---	432	351	392
16	294	278	288	338	302	322	---	---	---	469	349	405
17	298	276	290	332	300	319	---	---	---	462	368	416
18	302	280	293	332	300	318	---	---	---	425	321	370
19	---	---	---	339	304	322	333	300	317	412	312	360
20	---	---	---	334	297	319	342	293	319	420	320	369
21	---	---	---	333	296	316	364	303	328	437	329	375
22	---	---	---	342	297	316	365	308	337	417	333	370
23	---	---	---	341	294	320	363	310	338	427	330	382
24	---	---	---	342	296	320	361	294	334	445	325	395
25	317	293	305	340	296	320	362	298	332	480	342	420
26	324	294	309	342	293	320	363	302	336	483	356	417
27	325	297	312	345	290	319	365	315	342	441	341	392
28	328	293	313	346	293	322	369	308	343	452	346	401
29	332	295	315	345	280	316	376	311	346	477	343	410
30	330	295	313	334	280	308	377	315	351	496	366	421
31	---	---	---	330	289	310	376	318	349	---	---	---
MONTH	332	233	280	346	280	318	377	269	319	496	307	382

PH (UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	6.6	6.2	6.4	6.5	5.9	6.2	6.6	6.4	6.5	6.6	6.4	6.5
2	6.6	6.4	6.5	6.7	6.2	6.4	6.4	6.4	6.4	6.6	6.4	6.5
3	6.6	6.4	6.5	6.6	6.3	6.4	6.4	6.3	6.4	6.5	6.4	6.5
4	6.6	6.4	6.5	6.5	6.2	6.4	6.4	6.3	6.4	6.5	6.3	6.4
5	6.6	6.4	6.5	6.3	6.0	6.1	6.5	6.3	6.4	6.5	6.3	6.4
6	6.8	6.4	6.6	6.8	6.0	6.3	6.5	6.3	6.4	6.5	6.3	6.4
7	7.0	6.6	6.8	6.7	6.5	6.6	6.5	6.3	6.4	6.5	6.3	6.4
8	7.0	6.5	6.8	6.6	6.5	6.6	6.7	6.4	6.5	6.6	6.4	6.5
9	7.0	6.7	6.8	6.6	6.5	6.6	6.7	6.4	6.6	6.5	6.3	6.4
10	7.0	6.6	6.8	6.6	6.5	6.6	6.6	6.4	6.5	6.6	6.3	6.4
11	7.6	6.7	7.1	6.6	6.6	6.6	6.6	6.4	6.5	6.6	6.2	6.4
12	8.5	7.3	7.7	6.6	6.5	6.6	6.6	6.4	6.5	6.6	6.4	6.5
13	8.1	7.3	7.6	6.6	6.5	6.6	6.6	6.3	6.5	6.7	6.4	6.6
14	8.7	7.5	8.1	6.7	6.5	6.6	6.5	6.4	6.5	6.6	6.4	6.5
15	8.1	7.4	7.7	6.7	6.5	6.6	6.6	6.3	6.4	6.6	6.3	6.5
16	8.1	7.1	7.5	6.7	6.5	6.6	6.6	6.3	6.5	6.5	6.3	6.4
17	7.5	6.9	7.2	6.7	6.5	6.6	6.7	6.4	6.5	6.6	6.2	6.4
18	7.3	6.8	6.9	6.7	6.5	6.6	6.6	6.4	6.5	6.5	6.2	6.4
19	6.8	6.5	6.7	6.7	6.5	6.5	6.6	6.2	6.4	6.5	6.3	6.4
20	7.0	6.6	6.7	6.7	6.4	6.5	6.6	6.3	6.4	6.5	6.3	6.4
21	6.7	6.4	6.5	6.6	6.4	6.5	6.6	6.3	6.4	6.5	6.3	6.4
22	6.6	6.3	6.5	6.6	6.3	6.5	6.6	6.3	6.4	6.5	6.3	6.4
23	6.4	6.0	6.2	6.6	6.3	6.5	6.5	6.3	6.4	6.5	6.2	6.4
24	6.4	5.8	6.1	6.6	6.4	6.5	6.6	6.3	6.4	6.5	6.3	6.4
25	6.6	6.1	6.3	6.6	6.3	6.5	6.5	6.3	6.4	6.5	6.3	6.4
26	6.3	6.0	6.1	6.6	6.3	6.4	6.6	6.4	6.5	6.5	6.3	6.4
27	6.3	5.7	6.0	6.7	6.4	6.6	6.7	6.4	6.6	6.5	6.3	6.4
28	6.4	5.6	6.0	6.8	6.6	6.7	6.7	6.6	6.6	6.5	6.2	6.4
29	6.1	5.6	5.9	6.8	6.7	6.8	6.7	6.6	6.7	6.5	6.2	6.4
30	6.5	5.7	6.1	6.7	6.6	6.6	6.7	6.5	6.6	6.5	6.3	6.4
31	6.6	6.0	6.4	---	---	---	6.7	6.5	6.6	6.5	6.2	6.3
MONTH	8.7	5.6	6.7	6.8	5.9	6.5	6.7	6.2	6.5	6.7	6.2	6.4

0146 200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE AT PHILADELPHIA, PA--Continued

PH (UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	6.5	6.2	6.3	6.6	6.4	6.5	6.6	6.5	6.6	6.6	6.4	6.5
2	6.5	6.2	6.4	6.6	6.3	6.4	6.6	6.5	6.5	6.5	6.4	6.5
3	6.5	6.2	6.3	6.6	6.3	6.4	6.5	6.1	6.4	6.5	6.3	6.4
4	6.5	6.2	6.3	6.5	6.2	6.4	6.4	6.3	6.3	6.4	6.2	6.3
5	6.6	6.2	6.4	6.5	6.3	6.4	6.5	6.2	6.4	6.4	6.3	6.3
6	6.6	6.2	6.4	6.5	6.3	6.4	6.5	6.4	6.4	6.4	6.3	6.3
7	6.6	6.3	6.4	6.5	6.3	6.4	6.5	6.4	6.4	6.4	6.3	6.3
8	6.6	6.3	6.4	6.5	6.3	6.4	6.5	6.4	6.4	6.4	6.2	6.3
9	6.5	6.2	6.4	6.5	6.3	6.4	6.5	6.3	6.4	6.4	6.2	6.3
10	6.5	6.3	6.4	6.5	6.3	6.4	6.4	6.3	6.4	6.5	6.0	6.3
11	6.6	6.2	6.4	6.6	6.3	6.4	6.5	6.4	6.4	6.5	6.2	6.3
12	6.6	6.3	6.4	6.6	6.5	---	6.5	6.3	6.4	6.5	6.2	6.3
13	6.6	6.3	6.4	---	---	---	6.5	6.4	6.4	6.4	6.2	6.3
14	6.6	6.3	6.4	---	---	---	6.5	6.3	6.4	6.4	6.1	6.2
15	6.6	6.2	6.4	---	---	---	6.4	6.3	6.4	6.4	6.1	6.3
16	6.5	6.2	6.3	---	---	---	6.5	6.3	6.4	6.4	6.2	6.3
17	6.5	6.3	6.4	---	---	---	6.5	6.4	6.4	6.4	6.1	6.3
18	6.6	6.2	6.4	---	---	---	6.4	6.3	6.4	6.4	6.1	6.3
19	6.6	6.3	6.4	---	---	---	6.4	6.3	6.3	6.3	6.2	6.3
20	6.6	6.2	6.4	---	---	---	6.4	6.2	6.3	6.3	6.2	6.2
21	6.5	6.2	6.3	6.5	6.4	---	6.4	6.3	6.4	6.3	6.1	6.2
22	6.5	6.1	6.3	6.5	6.2	6.4	6.4	6.3	6.3	6.2	6.1	6.2
23	6.5	6.2	6.3	6.2	5.8	6.0	6.4	6.3	6.4	6.2	6.1	6.2
24	6.5	6.2	6.4	5.8	5.5	5.7	6.5	6.3	6.4	6.3	6.0	6.1
25	6.6	6.2	6.4	5.8	5.7	5.7	6.5	6.2	6.4	6.2	6.0	6.1
26	6.6	6.2	6.4	6.0	5.7	5.9	6.5	6.2	6.4	6.3	6.0	6.1
27	6.5	6.2	6.4	6.2	6.0	6.1	6.5	6.3	6.4	6.3	6.1	6.2
28	6.6	6.3	6.4	6.3	6.1	6.2	6.5	6.3	6.4	6.3	6.0	6.1
29	6.6	6.3	6.4	6.4	6.1	6.3	6.5	6.3	6.4	6.3	6.0	6.2
30	---	---	---	6.4	6.3	6.3	6.6	6.3	6.4	6.3	6.0	6.1
31	---	---	---	6.6	6.3	6.4	---	---	---	6.2	6.0	6.1
MONTH	6.6	6.1	6.4	6.6	5.5	6.3	6.6	6.1	6.4	6.6	6.0	6.3

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	6.3	6.0	6.1	6.4	6.3	6.3	6.4	6.3	6.4	6.6	6.4	6.5
2	6.2	6.0	6.1	6.4	6.2	6.3	6.4	6.3	6.4	6.6	6.4	6.5
3	6.2	6.0	6.1	6.4	6.3	6.4	6.4	6.3	6.4	6.6	6.4	6.5
4	6.4	6.0	6.2	6.4	6.3	6.4	6.5	6.3	6.4	6.6	6.4	6.5
5	6.4	6.2	6.3	6.4	6.3	6.4	6.5	6.3	6.4	6.6	6.4	6.5
6	6.4	6.2	6.3	6.4	6.3	6.4	6.4	6.3	6.4	6.6	6.4	6.5
7	6.4	6.2	6.3	6.4	6.3	6.4	6.4	6.3	6.4	6.6	6.4	6.5
8	6.4	6.2	6.3	6.4	6.3	6.4	6.4	6.3	6.3	6.6	6.4	6.5
9	6.5	6.3	6.3	6.4	6.3	6.4	6.4	6.3	6.3	6.6	6.4	6.5
10	6.4	6.2	6.3	6.4	6.3	6.4	6.4	6.2	6.3	6.5	6.4	6.5
11	6.5	6.2	6.3	6.4	6.3	6.4	6.4	6.2	6.3	6.6	6.3	6.5
12	6.4	6.2	6.3	6.4	6.3	6.4	6.4	6.2	6.3	6.6	6.4	6.5
13	6.5	6.2	6.3	6.5	6.4	6.4	6.4	6.2	6.3	6.6	6.4	6.5
14	6.4	6.2	6.3	6.5	6.4	6.4	6.4	6.2	6.3	6.6	6.4	6.5
15	6.5	6.2	6.3	6.5	6.4	6.4	6.4	6.2	---	6.6	6.4	6.5
16	6.4	6.2	6.3	6.5	6.4	6.4	---	---	---	6.5	6.1	6.3
17	6.5	6.2	6.3	6.5	6.4	6.4	---	---	---	6.3	6.0	6.1
18	6.4	6.2	6.3	6.5	6.4	6.4	---	---	---	6.3	6.1	6.2
19	---	---	---	6.5	6.4	6.5	6.4	6.1	6.3	6.3	6.1	6.2
20	---	---	---	6.5	6.4	6.5	6.6	6.4	6.5	6.3	6.1	6.2
21	---	---	---	6.5	6.5	6.5	6.6	6.4	6.5	6.3	6.1	6.2
22	---	---	---	6.5	6.4	6.5	6.6	6.4	6.5	6.3	6.1	6.2
23	---	---	---	6.5	6.4	6.4	6.6	6.5	6.6	6.3	6.1	6.2
24	---	---	---	6.5	6.4	6.5	6.7	6.5	6.6	6.3	6.1	6.2
25	6.5	6.3	6.4	6.5	6.4	6.5	6.7	6.5	6.6	6.3	6.1	6.2
26	6.4	6.2	6.3	6.5	6.4	6.5	6.6	6.5	6.6	6.3	6.1	6.2
27	6.4	6.2	6.3	6.5	6.4	6.5	6.6	6.4	6.5	6.3	6.1	6.2
28	6.4	6.2	6.3	6.5	6.4	6.4	6.6	6.4	6.5	6.3	6.1	6.2
29	6.4	6.2	6.3	6.5	6.4	6.4	6.6	6.4	6.5	6.3	6.1	6.2
30	6.4	6.2	6.3	6.4	6.3	6.4	6.6	6.4	6.5	6.3	6.1	6.2
31	---	---	---	6.4	6.3	6.4	6.6	6.4	6.5	---	---	---
MONTH	6.5	6.0	6.3	6.5	6.2	6.4	6.7	6.1	6.4	6.6	6.0	6.4

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE AT PHILADELPHIA, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	19.5	19.0	19.5	14.5	14.0	14.0	11.5	10.0	10.5	6.0	5.5	5.5
2	19.5	19.0	19.5	14.5	14.0	14.5	10.5	9.0	9.5	6.0	5.5	5.5
3	19.5	19.0	19.5	14.5	13.5	14.5	9.0	8.0	8.5	6.0	5.5	5.5
4	20.0	19.5	19.5	14.0	13.0	13.5	9.0	7.5	8.5	5.5	5.0	5.5
5	20.0	19.0	19.5	13.5	12.5	13.0	8.0	7.0	7.5	5.5	4.5	5.0
6	19.0	18.0	18.5	13.0	12.5	12.5	7.5	7.0	7.5	5.0	4.5	4.5
7	18.5	17.0	18.0	12.5	12.0	12.5	7.5	6.5	7.0	5.0	4.0	4.5
8	17.5	16.5	17.0	12.5	12.0	12.0	7.0	6.0	6.5	4.5	4.0	4.5
9	16.5	15.5	16.5	12.0	11.5	12.0	6.5	6.0	6.0	4.5	4.0	4.5
10	15.5	15.0	15.5	12.0	11.5	12.0	6.0	5.5	6.0	4.5	4.0	4.0
11	14.5	14.0	14.0	12.0	11.0	11.5	6.5	6.0	6.0	5.0	4.0	4.5
12	14.0	13.5	13.5	11.5	11.0	11.5	6.5	6.0	6.5	5.0	4.0	4.5
13	13.5	13.0	13.0	11.5	11.0	11.0	6.5	6.5	6.5	4.5	4.0	4.0
14	13.0	12.0	12.5	11.5	10.5	11.0	6.5	6.5	6.5	4.5	4.0	4.5
15	12.5	12.0	12.5	11.0	10.5	10.5	6.5	6.5	6.5	5.0	4.5	5.0
16	12.5	12.0	12.5	11.0	10.5	10.5	6.5	6.5	6.5	5.0	4.5	5.0
17	12.5	12.0	12.5	10.5	10.5	10.5	6.5	6.0	6.0	5.0	4.5	5.0
18	13.0	12.5	12.5	10.5	10.5	10.5	6.0	5.5	6.0	5.5	5.0	5.0
19	13.0	12.5	13.0	11.0	10.5	10.5	6.0	5.0	5.5	5.5	5.0	5.0
20	13.5	13.0	13.0	11.0	10.5	10.5	5.5	5.0	5.0	5.0	5.0	5.0
21	13.5	13.0	13.5	11.0	10.5	10.5	5.0	5.0	5.0	5.0	5.0	5.0
22	14.5	13.5	14.0	11.0	10.5	10.5	5.0	4.5	5.0	5.5	5.0	5.0
23	15.0	14.0	14.5	11.0	10.5	10.5	5.0	4.5	5.0	5.5	5.0	5.5
24	15.0	14.5	14.5	11.0	10.5	11.0	5.0	4.5	5.0	5.5	5.0	5.0
25	15.0	14.5	14.5	11.5	11.0	11.0	5.5	5.0	5.5	5.0	5.0	5.0
26	14.5	14.0	14.5	12.0	11.0	11.5	5.5	5.0	5.0	5.0	4.5	5.0
27	14.5	14.0	14.0	12.0	11.5	12.0	5.0	4.5	5.0	5.0	4.5	4.5
28	14.0	13.5	14.0	12.5	11.5	12.0	5.0	4.5	5.0	5.0	4.5	4.5
29	14.5	14.0	14.0	13.0	12.5	13.0	6.0	5.0	5.5	4.5	4.5	4.5
30	14.5	14.0	14.0	12.5	11.0	12.0	6.0	5.0	5.5	4.5	4.0	4.0
31	14.5	14.0	14.0	---	---	---	6.0	5.5	5.5	4.0	3.5	4.0
MONTH	20.0	12.0	15.0	14.5	10.5	12.0	11.5	4.5	6.5	6.0	3.5	5.0

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	4.0	3.0	3.5	4.0	3.5	4.0	8.0	7.5	8.0	14.0	13.0	14.0
2	3.5	2.5	3.0	4.0	3.0	3.5	8.0	7.5	8.0	13.5	13.0	13.5
3	3.0	2.5	3.0	3.5	3.0	3.5	8.5	7.5	8.0	13.5	13.0	13.5
4	3.0	2.5	2.5	4.0	3.0	3.5	9.0	8.0	8.5	14.0	13.5	13.5
5	3.0	2.0	2.5	4.0	3.5	4.0	9.0	8.5	9.0	15.0	14.0	14.5
6	2.5	2.0	2.5	4.5	4.0	4.0	9.5	9.0	9.5	16.0	15.0	15.5
7	2.5	2.0	2.5	5.0	4.0	4.5	10.0	9.5	10.0	17.0	15.5	16.5
8	2.5	2.0	2.5	5.5	4.5	5.0	10.5	10.0	10.5	17.5	16.5	16.5
9	2.5	2.0	2.5	5.5	5.0	5.5	11.0	10.5	11.0	17.5	16.5	17.0
10	2.5	2.0	2.5	6.0	5.0	5.5	12.0	11.5	11.5	17.5	17.0	17.0
11	2.5	2.0	2.5	6.0	5.5	6.0	13.0	12.0	12.5	17.5	17.0	17.5
12	2.5	2.0	2.5	6.0	5.5	---	13.0	12.5	13.0	18.0	17.0	17.5
13	2.5	2.0	2.5	---	---	---	13.0	12.5	13.0	18.5	17.5	18.0
14	3.0	2.0	2.5	---	---	---	13.0	12.5	12.5	18.5	18.0	18.5
15	3.0	2.5	2.5	---	---	---	13.0	12.5	12.5	18.5	18.0	18.5
16	3.0	2.5	3.0	---	---	---	12.5	12.0	12.5	18.5	18.0	18.5
17	3.0	2.5	2.5	---	---	---	12.0	11.5	12.0	18.5	18.0	18.5
18	2.5	2.5	2.5	---	---	---	12.0	11.5	12.0	18.5	18.0	18.5
19	3.0	2.5	2.5	---	---	---	12.0	11.5	11.5	19.0	18.0	18.5
20	3.0	2.5	3.0	---	---	---	12.0	11.5	12.0	19.0	18.5	19.0
21	3.5	3.0	3.0	8.5	8.0	---	12.5	11.5	12.0	19.0	18.5	19.0
22	3.5	3.0	3.5	8.5	7.0	7.5	12.5	12.0	12.5	19.5	18.5	19.0
23	4.0	3.5	3.5	7.0	6.0	6.5	13.0	12.5	13.0	20.0	19.0	19.5
24	4.0	3.5	4.0	5.5	4.5	5.0	14.0	13.0	13.5	20.0	20.0	20.0
25	4.0	4.0	4.0	5.0	4.5	5.0	14.5	13.5	14.0	20.5	20.0	20.5
26	4.5	4.0	4.0	6.0	5.0	5.5	14.5	14.0	14.5	20.5	20.0	20.0
27	4.5	4.0	4.0	6.5	5.5	6.0	14.5	14.0	14.5	20.5	20.0	20.0
28	4.5	4.0	4.0	6.5	6.0	6.5	14.5	14.0	14.5	20.5	20.0	20.0
29	4.5	4.0	4.0	7.0	6.5	6.5	14.5	14.0	14.5	20.5	20.0	20.5
30	---	---	---	7.5	6.5	7.0	14.5	14.0	14.5	21.0	20.5	20.5
31	---	---	---	8.0	7.0	7.5	---	---	---	21.0	20.5	20.5
MONTH	4.5	2.0	3.0	8.5	3.0	5.5	14.5	7.5	12.0	21.0	13.0	18.0

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	21.5	20.5	21.0	25.0	24.5	24.5	28.0	27.5	28.0	27.0	26.5	26.5
2	22.0	21.0	21.5	25.0	24.5	25.0	28.0	27.5	28.0	27.5	26.5	27.0
3	22.5	22.0	22.0	25.0	25.0	25.0	28.0	28.0	28.0	27.0	27.0	27.0
4	22.5	22.0	22.5	25.5	25.0	25.0	28.5	28.0	28.0	27.5	27.0	27.0
5	22.5	22.0	22.0	25.5	25.0	25.5	29.0	28.0	28.5	27.0	27.0	27.0
6	22.5	22.0	22.0	25.5	25.0	25.5	28.5	28.0	28.5	27.0	27.0	27.0
7	23.0	22.0	22.5	25.5	25.0	25.0	28.5	28.0	28.5	27.0	26.5	27.0
8	23.0	22.0	22.5	25.5	25.0	25.0	29.0	28.5	28.5	26.5	26.5	26.5
9	22.5	22.0	22.0	25.5	25.0	25.0	29.0	28.5	29.0	26.5	26.0	26.5
10	22.0	21.5	22.0	26.0	25.0	25.5	29.0	28.5	28.5	26.5	26.0	26.0
11	22.0	21.5	21.5	26.0	25.5	26.0	29.0	28.5	28.5	26.0	25.5	26.0
12	22.0	21.5	21.5	26.0	25.5	26.0	29.0	28.5	28.5	26.0	25.5	25.5
13	22.0	21.5	22.0	26.0	25.5	25.5	28.5	28.0	28.5	26.0	25.5	25.5
14	22.5	21.5	22.0	26.0	25.5	26.0	28.5	28.0	28.5	25.5	25.5	25.5
15	22.5	22.0	22.5	26.5	26.0	26.0	28.0	28.0	---	25.5	25.0	25.5
16	22.5	22.0	22.5	26.5	26.0	26.5	---	---	---	25.0	24.5	25.0
17	22.5	22.0	22.5	27.0	26.5	26.5	---	---	---	24.5	24.5	24.5
18	22.5	22.0	22.0	27.0	26.5	27.0	---	---	---	24.5	24.0	24.5
19	---	---	---	27.0	27.0	27.0	26.5	26.5	26.5	24.5	24.0	24.5
20	---	---	---	27.5	27.0	27.5	26.5	26.0	26.5	24.5	24.0	24.0
21	---	---	---	28.0	27.5	27.5	26.5	26.0	26.0	24.5	24.0	24.0
22	---	---	---	28.0	27.5	28.0	26.0	25.5	25.5	24.5	24.0	24.5
23	---	---	---	28.0	27.5	27.5	26.0	25.5	25.5	25.0	24.5	24.5
24	---	---	---	27.5	27.5	27.5	26.0	25.5	25.5	24.5	24.0	24.0
25	24.0	23.5	23.5	28.0	27.0	27.5	26.0	25.5	26.0	24.0	23.5	24.0
26	24.0	23.5	23.5	28.0	27.5	27.5	26.5	26.0	26.0	23.5	23.0	23.5
27	24.5	23.5	24.0	28.0	27.5	27.5	26.5	26.0	26.5	23.0	22.5	23.0
28	24.5	24.0	24.0	28.0	27.5	27.5	26.5	26.5	26.5	22.5	22.5	22.5
29	24.5	24.0	24.5	27.5	27.0	27.5	26.5	26.5	26.5	22.5	22.0	22.0
30	24.5	24.5	24.5	28.0	27.5	27.5	27.0	26.5	26.5	22.0	22.0	22.0
31	---	---	---	28.0	27.5	27.5	27.0	26.5	26.5	---	---	---
MONTH	24.5	20.5	22.5	28.0	24.5	26.5	29.0	25.5	27.5	27.5	22.0	25.0

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	3.5	2.0	2.7	5.3	3.7	4.3	9.3	7.9	8.4	10.6	9.7	10.1
2	4.5	2.1	3.3	5.2	3.5	4.1	9.4	8.1	8.7	10.5	9.6	10.0
3	4.6	2.6	3.7	5.8	3.5	4.3	9.7	8.6	9.1	10.6	9.4	9.9
4	4.9	3.2	4.0	6.8	3.8	5.1	9.9	8.5	9.1	10.6	9.3	9.9
5	4.9	3.3	3.9	7.5	4.9	6.2	10.2	8.9	9.5	10.8	9.3	9.8
6	5.6	3.6	4.6	7.5	5.9	6.8	10.3	8.9	9.5	10.6	9.2	9.7
7	5.9	4.8	5.3	7.6	6.5	7.0	10.2	8.8	9.4	10.6	9.2	9.8
8	6.3	5.5	5.8	7.8	6.4	7.0	10.4	8.9	9.9	11.0	9.7	10.3
9	6.4	5.4	5.8	7.8	6.1	6.9	11.0	9.7	10.3	11.0	9.4	10.0
10	6.3	5.2	5.7	7.9	6.0	6.7	11.0	9.8	10.3	10.6	9.1	9.8
11	6.4	5.4	5.9	8.2	6.4	7.1	10.9	9.4	10.1	10.5	8.9	9.5
12	---	---	---	8.1	6.6	7.3	10.4	9.0	9.6	11.0	9.2	9.9
13	---	---	---	8.1	6.7	7.3	10.4	8.6	9.4	11.5	10.1	10.8
14	---	---	---	8.6	6.7	7.9	9.4	8.3	8.8	11.4	9.9	10.6
15	8.6	7.5	7.9	8.6	7.3	8.0	9.4	8.1	8.7	10.9	9.7	10.3
16	8.5	7.0	7.8	8.3	7.2	7.8	9.6	8.1	8.8	10.7	9.4	9.9
17	8.1	6.6	7.2	8.1	7.2	7.6	10.7	8.2	9.5	10.4	9.1	9.6
18	7.7	6.2	6.9	8.1	7.0	7.5	10.0	9.0	9.5	9.9	8.6	9.2
19	7.6	5.9	6.7	8.0	6.8	7.2	10.1	8.9	9.3	9.7	8.5	9.0
20	7.1	5.3	6.2	7.8	6.5	7.0	9.8	8.8	9.2	9.7	8.5	9.1
21	7.2	5.5	6.3	7.7	6.0	6.7	10.1	8.5	9.1	9.6	8.5	9.0
22	6.9	5.4	6.1	7.2	5.4	6.2	10.0	8.3	8.9	9.9	8.4	9.0
23	6.5	5.0	5.6	7.4	5.5	6.3	9.8	8.3	8.9	9.5	8.2	8.7
24	6.1	4.8	5.3	7.6	5.7	6.4	10.2	8.3	9.1	9.5	8.4	8.8
25	6.2	4.8	5.4	7.5	5.8	6.5	10.1	8.5	9.2	9.6	8.0	8.7
26	6.1	4.7	5.3	7.6	5.9	6.5	10.6	8.9	9.7	9.0	7.7	8.4
27	6.1	4.5	5.2	8.3	6.4	7.1	11.4	9.6	10.6	9.0	7.6	8.2
28	6.4	4.5	5.1	9.2	7.4	8.4	11.5	10.7	11.1	9.1	7.6	8.2
29	5.9	4.5	5.1	8.8	8.0	8.3	11.2	10.6	10.9	9.1	7.7	8.3
30	5.7	4.3	4.9	8.8	7.9	8.3	10.9	10.3	10.6	9.4	7.9	8.5
31	5.3	4.0	4.6	---	---	---	10.7	10.0	10.3	9.3	7.8	8.3
MONTH	8.6	2.0	5.4	9.2	3.5	6.8	11.5	7.9	9.5	11.5	7.6	9.4

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE AT PHILADELPHIA, PA--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	9.4	7.8	8.4	9.0	7.0	7.8	11.0	10.6	10.8	8.3	6.3	7.2
2	9.7	8.1	8.5	8.9	7.1	7.8	11.0	10.6	10.7	8.4	7.0	7.7
3	9.6	8.2	8.7	8.9	7.4	7.9	11.4	10.4	10.8	8.6	7.0	7.7
4	9.8	8.3	8.7	8.6	7.3	7.6	11.0	10.3	10.5	8.6	7.3	8.0
5	10.0	8.3	8.8	8.5	6.8	7.5	10.9	10.3	10.6	8.8	7.5	7.9
6	9.7	8.4	8.8	8.7	6.9	7.5	10.9	10.3	10.5	8.2	6.8	7.3
7	9.6	8.3	8.7	8.6	6.6	7.3	10.5	10.0	10.2	7.8	6.2	6.8
8	9.6	8.1	8.5	8.4	6.3	7.0	10.4	9.5	9.9	7.1	5.3	6.1
9	9.4	7.7	8.3	7.8	6.2	6.9	10.2	9.0	9.4	6.7	4.9	5.6
10	9.3	7.5	8.2	8.2	6.1	6.8	9.1	8.0	8.5	6.8	4.7	5.5
11	9.4	7.5	8.1	8.3	5.9	7.0	8.7	7.9	8.3	6.6	4.8	5.5
12	9.9	7.5	8.3	8.8	7.1	---	9.2	7.9	8.5	6.4	4.3	5.1
13	9.5	7.5	8.3	---	---	---	9.5	8.3	8.8	5.4	3.8	4.4
14	9.4	7.5	8.2	---	---	---	9.7	8.6	9.0	6.2	3.6	4.6
15	9.4	7.4	8.1	---	---	---	8.9	8.1	8.4	6.0	4.0	4.9
16	8.8	7.2	7.7	---	---	---	9.1	8.3	8.7	5.8	4.1	4.8
17	8.7	7.2	7.8	---	---	---	9.3	8.5	8.8	5.6	3.8	4.5
18	9.3	7.4	8.0	---	---	---	9.2	8.3	8.6	5.5	3.8	4.4
19	9.3	7.5	8.2	---	---	---	9.5	8.4	8.9	5.1	3.5	4.0
20	9.4	7.4	8.1	---	---	---	9.9	8.5	9.2	4.4	2.8	3.4
21	8.7	7.0	7.6	10.1	9.3	---	10.0	8.8	9.3	3.7	2.1	2.8
22	8.7	6.6	7.3	11.3	9.4	10.5	9.4	8.5	8.9	3.6	1.7	2.5
23	8.2	6.3	7.0	11.6	10.8	11.1	9.2	7.8	8.5	4.0	1.7	2.6
24	8.1	6.2	7.0	12.3	11.5	11.8	9.1	7.3	8.2	3.9	1.4	2.3
25	8.6	6.1	7.2	12.3	11.9	12.0	8.6	6.8	7.7	3.9	1.3	2.3
26	8.6	6.2	7.2	12.1	11.7	11.9	8.1	6.4	7.3	4.8	1.9	3.1
27	8.6	6.3	7.1	11.9	11.4	11.6	7.8	6.4	7.0	5.4	2.8	3.8
28	8.8	6.5	7.4	11.7	11.1	11.4	7.6	6.2	6.8	5.6	3.0	3.9
29	8.9	6.6	7.5	11.6	10.8	11.2	7.2	5.8	6.3	6.0	3.0	4.1
30	---	---	---	11.6	11.0	11.2	7.8	5.6	6.7	5.4	3.1	4.0
31	---	---	---	11.4	10.7	11.1	---	---	---	4.8	2.6	3.3
MONTH	10.0	6.1	8.0	12.3	5.9	9.3	11.4	5.6	8.9	8.8	1.3	4.8

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	5.3	2.3	3.2	.8	.4	.6	.8	.0	.3	1.8	.5	1.1
2	4.7	2.7	3.4	1.0	.4	.7	.9	.0	.5	2.4	.8	1.4
3	4.3	2.2	2.9	.9	.4	.5	1.4	.3	.8	1.8	.7	1.2
4	3.4	1.8	2.3	1.0	.4	.5	1.6	.4	1.0	1.6	.5	1.0
5	3.2	1.6	2.2	1.2	.4	.8	2.2	.3	1.1	1.4	.4	.8
6	3.0	1.1	1.8	1.6	.4	.9	1.7	.5	.9	1.2	.3	.7
7	2.4	.7	1.3	1.5	.8	1.1	2.0	.4	1.0	1.5	.4	.9
8	2.1	.6	1.2	1.5	.6	1.1	1.9	.4	1.0	1.7	.5	1.0
9	3.5	1.3	2.0	1.3	.5	.9	1.6	.4	1.0	1.7	.4	1.0
10	2.4	1.3	1.8	.9	.4	.6	2.3	.5	1.3	1.6	.6	1.0
11	2.2	1.0	1.5	.7	.4	.5	2.1	.6	1.1	2.3	.5	1.1
12	2.2	.8	1.3	.8	.4	.5	1.3	.4	.8	2.1	.9	1.2
13	2.8	.6	1.4	1.3	.3	.7	1.3	.4	.7	1.4	.7	1.0
14	2.7	.7	1.3	1.5	.5	.8	1.5	.3	.7	1.4	.7	1.0
15	3.1	.8	1.6	1.4	.6	1.0	.6	.3	---	1.2	.7	.9
16	2.7	1.1	1.6	1.7	.4	1.0	---	---	---	1.2	.6	.9
17	3.0	.7	1.5	.9	.3	.5	---	---	---	1.1	.5	.8
18	2.6	.8	1.4	.7	.3	.4	---	---	---	1.2	.5	.7
19	---	---	---	.7	.3	.4	.6	.4	.5	.9	.5	.6
20	---	---	---	1.0	.3	.6	.8	.3	.5	1.3	.5	.7
21	---	---	---	1.2	.3	.6	.7	.3	.5	1.2	.5	.7
22	---	---	---	1.0	.3	.6	.7	.3	.4	1.0	.5	.7
23	---	---	---	.6	.3	.4	.8	.3	.5	1.1	.5	.7
24	---	---	---	.7	.3	.4	1.4	.3	.7	1.3	.5	.8
25	1.8	.6	1.2	.7	.3	.4	1.5	.4	.8	1.0	.4	.7
26	1.3	.4	.8	1.2	.3	.6	1.2	.3	.8	1.2	.4	.7
27	1.0	.4	.6	1.8	.3	.9	1.2	.4	.6	1.4	.5	.9
28	1.5	.4	.7	2.1	.7	1.3	1.1	.3	.5	1.7	.6	1.1
29	1.2	.4	.7	1.4	.4	.8	.8	.3	.5	2.1	.9	1.5
30	.9	.4	.6	.8	.3	.5	.9	.3	.5	1.6	.9	1.2
31	---	---	---	.8	.3	.5	1.1	.3	.7	---	---	---
MONTH	5.3	.4	1.6	2.1	.3	.7	2.3	.0	.7	2.4	.3	.9

01468500 SCHUYLKILL RIVER AT LANDINGVILLE, PA

LOCATION.--Lat 40°37'45", long 76°07'30", Schuylkill County, Hydrologic Unit 02040203, on left bank 10 ft (3 m) upstream from highway bridge at Landingville, 0.1 mi (0.2 km) upstream from Mahannon Creek, and 5 mi (8.0 km) downstream from West Branch Schuylkill River.

DRAINAGE AREA.--133 mi^2 (344 km^2)

PERIOD OF RECORD.--August 1947 to April 1953, October 1963 to September 1965, August 1973 to current year.

REVISED RECORDS.--WDR PA-75-1: 1973(P), 1974(P).

GAGE.--Water-stage recorder. Datum of gage is 470.64 ft (143.451 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 27, 1947, nonrecording gage 10 ft (3 m) downstream at same datum.

REMARKS.--Records good except those for period Feb. 1 to Mar. 27, which are fair.

AVERAGE DISCHARGE.--14 years (Water years 1948-52, 1964-65, 1975-80), 301 ft^3/s (8.524 m^3/s), 30.78 in/yr (782 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,570 ft^3/s (243 m^3/s) Nov. 25, 1950, gage height, 13.29 ft (4.051 m); minimum, 19 ft^3/s (0.54 m^3/s) Oct. 30, 31, Nov. 4, 1963.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1972 reached a stage of 17.36 ft (5.291 m), discharge, 14,000 ft^3/s (396 m^3/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,300 ft^3/s (36.8 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 5	1715	1,310	37.1	6.40	1.951	Apr. 9	1015	1,600	45.3	6.99	2.131
Mar. 21	1900	*2,660	75.3	*8.92	2.719						

Minimum discharge, 45 ft^3/s (1.27 m^3/s) Sept. 27, 28, gage height, 2.90 ft (0.884 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	669	272	389	347	160	95	619	544	261	103	98	58
2	547	406	347	337	150	90	596	507	247	98	91	64
3	942	733	321	331	140	90	566	475	258	95	177	62
4	903	615	312	312	150	90	588	413	239	93	93	64
5	911	551	302	306	140	100	507	389	205	98	84	62
6	865	500	290	261	130	95	454	373	197	115	84	58
7	741	461	284	261	120	93	433	353	191	88	91	52
8	642	420	258	255	130	112	413	331	194	88	86	58
9	592	393	247	244	140	138	1050	315	194	86	86	70
10	577	413	244	233	130	112	1050	299	213	84	79	93
11	507	373	238	281	120	115	852	278	182	88	93	68
12	489	363	233	379	115	95	729	497	171	95	143	66
13	454	340	306	258	105	102	627	806	163	79	91	60
14	403	327	267	269	100	177	785	630	154	84	88	50
15	373	278	227	284	105	120	903	536	140	91	91	108
16	353	272	225	267	120	120	798	482	149	117	84	68
17	337	250	225	264	110	260	701	440	149	154	70	68
18	321	236	210	261	100	750	623	409	149	98	70	72
19	299	225	210	255	90	565	566	389	146	95	75	64
20	287	222	208	230	130	450	497	363	160	81	73	56
21	275	213	194	239	110	1320	465	454	146	84	70	50
22	264	202	197	241	130	1610	426	366	117	95	70	56
23	312	197	197	236	150	985	396	321	117	197	70	58
24	420	202	227	216	145	800	369	290	125	132	62	60
25	309	213	839	208	130	785	343	269	120	105	68	62
26	281	638	729	194	120	640	327	253	115	95	75	62
27	269	717	600	185	110	566	343	250	110	84	75	49
28	334	596	522	194	105	518	504	247	98	86	64	47
29	309	507	475	188	100	638	654	236	117	95	70	54
30	284	440	416	174	---	570	573	230	166	91	66	58
31	281	---	383	168	---	600	---	247	---	95	62	---
TOTAL	14550	11575	10122	7878	3585	12801	17757	11992	4993	3089	2599	1877
MEAN	469	386	327	254	124	413	592	387	166	99.6	83.8	62.6
MAX	942	733	839	379	160	1610	1050	806	261	197	177	108
MIN	264	197	194	168	90	90	327	230	98	79	62	47
CFSM	3.53	2.90	2.46	1.91	.93	3.11	4.45	2.91	1.25	.75	.63	.47
IN.	4.07	3.24	2.83	2.20	1.00	3.58	4.97	3.35	1.40	.86	.73	.52

CAL YR 1979 TOTAL 154479 MEAN 423 MAX 2850 MIN 102 CFSM 3.18 IN 43.21
WTR YR 1980 TOTAL 102818 MEAN 281 MAX 1610 MIN 47 CFSM 2.11 IN 28.76

01469500 LITTLE SCHUYLKILL RIVER AT TAMAQUA, PA

LOCATION.--Lat 40°48'25", long 75°58'20", Schuylkill County, Hydrologic Unit 02040203, on left bank at pumping plant of Panther Valley Water Co., 0.6 mi (1.0 km) upstream from Tamaqua, and 0.8 mi (1.3 km) upstream from Panther Creek.

DRAINAGE AREA.--42.9 mi^2 (111.1 km^2).

PERIOD OF RECORD.--October 1919 to current year. Monthly discharge only for some periods, published in WSP 1302. June 1916 to September 1919, gage heights and discharge measurements only, in reports of Water Supply Commission of Pennsylvania.

REVISED RECORDS.--WSP 756: Drainage area. WSP 971: 1942. WSP 1302: 1922, 1926-30. WSP 1432: 1920-21, 1933.

GAGE.--Water-stage recorder and broad-crested weir. Datum of gage is 817.48 ft (249.168 m) National Geodetic Vertical Datum of 1929. Prior to June 21, 1929, nonrecording gage at site 3,600 ft (1,100 m) downstream at datum 28.64 ft (8.729 m) lower.

REMARKS.--Records good. Flow regulated by Still Creek Reservoir (station 01469200) 6.5 mi (10.5 km) upstream. Figures of daily discharge do not include water diverted from reservoir. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--61 years, 93.4 ft^3/s (2.645 m^3/s), 29.57 in/yr (751 mm/yr), adjusted for diversion and, since February 1933, for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,790 ft^3/s (221 m^3/s) Aug. 18, 1955, gage height, 11.10 ft (3.383 m), from rating curve extended above 3,200 ft^3/s (91 m^3/s) on basis of contracted-opening measurement of peak flow; minimum, 1.8 ft^3/s (0.051 m^3/s) Dec. 18, 1931, gage height, 1.21 ft (0.369 m); minimum daily, 2.9 ft^3/s (0.082 m^3/s) Sept. 2, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 890 ft^3/s (25.2 m^3/s) Mar. 21, gage height, 4.45 ft (1.356 m); minimum, 5.2 ft^3/s (0.15 m^3/s) Sept. 30, gage height, 1.65 ft (0.503 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	182	66	135	102	37	23	208	193	72	23	14	8.2
2	196	102	118	91	36	22	211	164	59	22	13	8.0
3	253	227	104	83	34	20	199	146	61	22	21	9.2
4	288	205	94	75	33	19	211	128	66	22	17	7.6
5	308	181	87	72	31	20	184	114	52	25	15	8.2
6	338	162	81	66	30	20	159	102	46	30	14	8.0
7	255	143	77	61	28	19	146	96	46	23	13	7.3
8	211	128	70	58	27	24	130	94	46	21	13	7.1
9	181	114	63	53	27	29	274	79	45	19	14	6.8
10	173	116	59	50	27	24	310	72	50	18	13	7.1
11	148	107	56	64	31	22	260	72	43	17	15	6.6
12	135	100	55	118	25	21	220	111	39	16	15	6.2
13	126	89	72	79	25	26	190	162	39	15	13	5.7
14	109	87	70	74	24	39	211	135	37	14	13	6.4
15	98	79	58	77	24	23	240	121	36	13	13	9.2
16	89	79	55	72	26	22	208	109	36	14	13	8.2
17	83	74	59	68	25	81	187	100	33	17	12	12
18	79	70	50	66	24	340	167	98	32	16	12	12
19	75	66	50	64	23	202	148	100	31	16	12	9.0
20	70	64	52	61	24	156	133	100	33	15	11	8.0
21	68	63	47	59	24	480	121	111	31	14	11	8.0
22	64	61	47	56	26	600	104	100	30	15	10	7.3
23	68	59	47	55	37	371	96	83	26	26	10	7.1
24	109	58	56	50	38	277	89	77	26	24	9.9	6.4
25	81	64	260	49	32	274	83	75	26	17	9.6	6.6
26	70	164	274	47	29	217	77	68	24	16	8.5	7.6
27	66	243	220	46	28	181	83	61	24	15	8.7	7.1
28	79	214	181	45	26	162	143	58	23	14	8.7	8.2
29	81	181	154	42	24	193	236	53	24	15	8.0	6.2
30	74	156	133	40	---	187	217	47	26	15	8.2	5.9
31	68	---	116	39	---	190	---	49	---	14	8.5	---
TOTAL	4225	3522	3000	1982	825	4284	5245	3078	1162	563	377.1	231.2
MEAN	136	117	96.8	63.9	28.4	138	175	99.3	38.7	18.2	12.2	7.71
MAX	338	243	274	118	38	600	310	193	72	30	21	12
MIN	64	58	47	39	23	19	77	47	23	13	8.0	5.7
≠	7.8	7.0	6.4	7.0	7.3	8.6	8.3	9.3	8.6	8.7	9.3	9.3
MEAN†	147	125	103	70.1	34.7	149	183	108	44.8	20.6	15.6	12.0
CFSM†	3.43	2.91	2.40	1.64	.81	3.47	4.27	2.51	1.04	.48	.36	.28
IN.†	3.95	3.25	2.77	1.89	.87	4.00	4.76	2.90	1.17	.56	.42	.31

CAL YR 1979 TOTAL 44339.0 MEAN 121 MAX 1050 MIN 17 MEAN≠ 131 CFSM≠ 3.06 IN.≠ 41.60
WTR YR 1980 TOTAL 28494.3 MEAN 77.9 MAX 600 MIN 5.7 MEAN≠ 84.6 CFSM≠ 1.97 IN.≠ 26.85

≠ Diversion from Still Creek Reservoir, equivalent in cubic feet per second, furnished by Panther Valley Water Company.

† Adjusted for diversion and change in contents in Still Creek Reservoir.

01470500 SCHUYLKILL RIVER AT BERNE, PA

LOCATION.--Lat 40°31'21", long 75°59'55", Berks County, Hydrologic Unit 02040203, on right bank 50 ft (15 m) upstream from highway bridge at Berne, 0.5 mi (0.8 km) upstream from Mill Creek, and 6.5 mi (10.5 km) downstream from Little Schuylkill River. Water-quality sampling site at bridge 50 ft (15 m) downstream.

DRAINAGE AREA.--355 mi^2 (919 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1947 to current year. Monthly discharge only for August 1947, published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 310.65 ft (94.686 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Some regulation at low flow by mine pumpage and by Still Creek Reservoir (station 01469200) about 25 mi (40 km) upstream from station.

AVERAGE DISCHARGE.--33 years, 720 ft^3/s (20.39 m^3/s), 27.56 in/yr (700 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42,800 ft^3/s (1,210 m^3/s) June 22, 1972, gage height, 19.0 ft (5.79 m), from floodmark in gage shelter, from rating curve extended above 17,000 ft^3/s (481 m^3/s); minimum, 31 ft^3/s (0.88 m^3/s) Sept. 2, 1949.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1942 reached a stage of 15.0 ft (4.57 m), from floodmarks, discharge, 26,900 ft^3/s (762 m^3/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,780 ft^3/s (249 m^3/s) March 21, gage height, 9.83 ft (2.996 m); minimum, 46 ft^3/s (1.30 m^3/s) Sept. 9, gage height, 4.64 ft (1.414 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2040	531	998	799	330	230	1780	1660	600	231	180	110
2	2270	568	877	737	320	220	1770	1450	525	212	161	110
3	2400	1650	789	709	300	220	1640	1370	472	205	271	100
4	2620	1440	766	651	320	220	1610	1150	530	212	199	97
5	2380	1270	726	625	300	236	1380	1000	430	205	167	97
6	2770	1110	693	565	290	237	1160	920	385	275	155	85
7	2130	1010	664	531	290	225	1030	858	389	205	155	78
8	1740	903	596	520	310	237	955	779	441	199	155	65
9	1450	822	539	507	330	330	2300	713	364	199	155	72
10	1440	856	517	481	300	277	2880	665	482	186	148	135
11	1220	797	504	510	290	308	2310	626	382	186	174	110
12	1150	777	465	910	270	253	1900	827	356	193	218	78
13	1090	709	577	617	250	251	1620	2120	333	174	180	91
14	941	719	628	580	240	289	1800	1740	320	167	148	104
15	844	664	493	639	250	307	2210	1380	308	174	148	148
16	788	662	463	601	270	296	1990	1160	300	212	148	129
17	727	626	502	575	250	571	1690	1010	286	302	129	116
18	682	592	451	555	230	3310	1450	936	275	238	116	148
19	630	565	452	553	220	2140	1280	861	275	186	123	123
20	594	548	451	514	322	1520	1110	809	294	174	123	110
21	566	524	440	494	279	3810	994	939	282	155	116	97
22	539	511	438	495	318	5850	908	868	251	167	129	91
23	528	482	437	491	381	3300	817	704	238	299	129	97
24	887	475	503	455	390	2330	757	641	248	275	129	78
25	644	514	1980	430	319	2250	703	599	238	212	110	91
26	570	1220	2260	410	303	1780	665	544	231	186	110	110
27	532	2170	1730	400	257	1500	697	503	225	167	110	91
28	606	1700	1400	387	240	1290	1220	488	212	155	105	78
29	650	1390	1200	370	235	1600	2090	475	212	180	150	72
30	567	1150	1030	350	---	1580	1930	454	320	186	110	97
31	544	---	912	340	---	1550	---	462	---	167	110	---
TOTAL	36539	26955	24481	16801	8404	38517	44646	28711	10204	6284	4561	3008
MEAN	1179	899	790	542	290	1242	1488	926	340	203	147	100
MAX	2770	2170	2260	910	390	5850	2880	2120	600	302	271	148
MIN	528	475	437	340	220	220	665	454	212	155	105	65
CFSM	3.32	2.53	2.23	1.53	.82	3.50	4.19	2.61	.96	.57	.41	.28
IN.	3.83	2.82	2.57	1.76	.88	4.04	4.68	3.01	1.07	.66	.48	.32

CAL YR 1979 TOTAL 375899 MEAN 1030 MAX 14000 MIN 197 CFSM 2.90 IN 39.39
WTR YR 1980 TOTAL 249111 MEAN 681 MAX 5850 MIN 65 CFSM 1.92 IN 26.10

01470500 SCHUYLKILL RIVER AT BERNE, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1947 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1963 to current year
pH: October 1963 to September 1973.
WATER TEMPERATURES: February 1948 to September 1953, December 1957 to current year.
SUSPENDED SEDIMENT DISCHARGE: October 1947 to current year.

REMARKS.--Unpublished records of specific conductance and pH of sediment samples available in the district office at Harrisburg

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 1,410 micromhos Oct. 25, 26, 28, 1964; minimum daily, 107 micromhos Jan. 25, 1979.
WATER TEMPERATURES: Maximum daily, 33.0°C July 3, 1966, and Aug. 5, 1980; minimum, 0.0°C on many days during winter periods.
SEDIMENT CONCENTRATIONS: Maximum daily, 8,030 mg/L Nov. 4, 1947; minimum daily, 0 mg/L on many daus during 1952 and 1968.
SEDIMENT LOADS: Maximum daily, 90,180 tons (81,800 tonnes) Nov. 12, 1947; minimum daily, 0 ton (0 tonne) on many days during 1952 and 1968.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 793 micromhos Sept. 19; minimum daily, 134 micromhos Mar. 22.
WATER TEMPERATURES: Maximum daily, 33.0°C Aug. 5; minimum 2.0°C on many days during winter periods.
SEDIMENT CONCENTRATIONS: Maximum daily, 300 mg/L Oct. 1; minimum daily 2 mg/L on many days.
SEDIMENT LOADS: Maximum daily, 2,640 tons (2,400 tonnes) Oct. 1; minimum daily, 0.63 tons (0.57 tonnes) on several days in September.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM SUSPENDED RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)
MAR 25...	1512	2170	185	6.6	10.0	1	0	1
APR 04...	2000	1640	229	7.1	10.0	0	0	0
MAY 13...	1110	2330	277	7.1	14.5	0	0	0
JUN 18...	0930	275	515	6.7	19.5	0	0	0

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)
MAR 25...	5	4	1	16	12	4	10	9	1
APR 04...	5	4	1	11	7	4	8	7	1
MAY 13...	6	6	0	21	15	6	33	32	1
JUN 18...	10	9	1	7	3	4	10	10	0

01470500 SCHUYLKILL RIVER AT BERNE, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
MAR								
25...	15	2	13	50	20	30	--	--
APR								
04...	18	6	12	50	20	30	--	--
MAY								
13...	23	0	23	60	30	30	--	--
JUN								
18...	21	2	19	30	20	10	5.3	3.9

DATE	TIME	PCB TOTAL (UG/L)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)
OCT									
03...	1640	.00	.0	.00	.0	.00	.00	.00	.00
13...	1337	.00	.0	.00	.0	.00	.00	.00	.00
MAR									
25...	1512	.00	.0	.00	.0	.00	.00	.00	.00
APR									
04...	2000	.00	.0	.00	.0	.00	.00	.00	.00
MAY									
13...	1110	.10	.0	.00	.0	.00	.00	.00	.00

DATE	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METHOXYCHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PERTHANE TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)
OCT									
03...	.00	.00	.00	.00	.00	.00	.00	.00	0
13...	.00	.00	.00	.00	.00	.00	.00	.00	0
MAR									
25...	.00	.00	.00	.00	.00	.00	.00	.00	0
APR									
04...	.00	.00	.00	.00	.00	.00	.00	.00	0
MAY									
13...	.00	.00	.00	.00	.00	.00	.00	.00	0

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)
OCT											
03...	1640	3420	320	7.6	19.0	0	4	0	8	14	1
13...	1335	1070	280	6.9	17.0	0	14	--	8	4	22
MAR											
25...	1512	2170	185	6.6	10.0	1	5	--	16	10	15
APR											
04...	2000	1640	229	7.1	10.0	0	5	--	11	8	18
MAY											
13...	1110	2330	277	7.1	14.5	0	6	--	21	33	23
JUN											
18...	0930	275	515	6.7	19.5	0	10	--	7	10	21

01470500 SCHUYLKILL RIVER AT BERNE, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	PCB TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
OCT										
03...	10	--	--	.00	.0	.00	.0	.00	.00	.00
13...	50	--	--	--	--	--	--	--	--	--
MAR										
25...	50	--	--	.00	.0	.00	.0	.00	.00	.00
APR										
04...	50	--	--	.00	.0	.00	.0	.00	.00	.00
MAY										
13...	60	--	--	.10	.0	.00	.0	.00	.00	.00
JUN										
18...	30	5.3	3.9	--	--	--	--	--	--	--

DATE	DI-ELDRIN TOTAL (UG/L)	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)
OCT										
03...	.00	.00	.00	.00	.00	.00	.00	.00	.00	0
13...	--	--	--	--	--	--	--	--	--	--
MAR										
25...	.00	.00	.00	.00	.00	.00	.00	.00	.00	0
APR										
04...	.00	.00	.00	.00	.00	.00	.00	.00	.00	0
MAY										
13...	.00	.00	.00	.00	.00	.00	.00	.00	.00	0
JUN										
18...	--	--	--	--	--	--	--	--	--	--

DATE	TIME	ANTI-MONY, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BERYL-LIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)
NOV										
13...	0845	2	0	3	<10	20	110	830	.00	70

DATE	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	SILVER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS AG)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
NOV										
13...	2	<1	520	55	1.0	56	47	.0	7	.6

01470500 SCHUYLKILL RIVER AT BERNE, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
NOV									
13...	.6	1.4	.0	.0	.0	.0	.0	.0	0

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	TEMPERATURE, WATER (DEG C)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM
MAR								
18...	1130	3660	5.0	138	1360	60	74	86
21...	1530	4190	9.0	137	1550	49	59	69
APR								
09...	1515	3760	14.0	112	1140	48	61	80

DATE	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
MAR							
18...	93	95	97	99	100	--	--
21...	79	85	91	96	99	100	--
APR							
09...	90	90	93	96	98	99	100

01470500 SCHUYLKILL RIVER AT BERNE, PA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L) OCTOBER	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L) NOVEMBER	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L) DECEMBER	SEDIMENT DISCHARGE (TONS/DAY)
1	2040	300	2630	531	3	4.3	998	6	16
2	2270	45	276	568	7	11	877	5	12
3	2400	65	421	1650	26	116	789	5	11
4	2620	35	248	1440	11	43	766	5	10
5	2380	30	193	1270	5	17	726	4	7.8
6	2770	37	277	1110	3	9.0	693	4	7.5
7	2130	19	109	1010	2	5.5	664	4	7.2
8	1740	10	47	903	2	4.9	596	5	8.0
9	1450	9	35	822	2	4.4	539	5	7.3
10	1440	8	31	856	4	9.2	517	4	5.6
11	1220	7	23	797	8	17	504	4	5.4
12	1150	6	19	777	6	13	465	5	6.3
13	1090	7	21	709	3	5.7	577	9	14
14	941	6	15	719	4	7.8	628	8	14
15	844	5	11	664	3	5.4	493	4	5.3
16	788	4	8.5	662	3	5.4	463	3	3.8
17	727	3	5.9	626	3	5.1	502	7	9.5
18	682	3	5.5	592	2	3.2	451	5	6.1
19	630	3	5.1	565	2	3.1	452	4	4.9
20	594	3	4.8	548	2	3.0	451	5	6.1
21	566	3	4.6	524	2	2.8	440	5	5.9
22	539	3	4.4	511	2	2.8	438	5	5.9
23	528	3	4.3	482	2	2.6	437	5	5.9
24	887	12	29	475	2	2.6	503	7	9.5
25	644	6	10	514	4	5.6	1980	57	411
26	570	5	7.7	1220	30	99	2260	30	183
27	532	4	5.7	2170	28	164	1730	15	70
28	606	6	9.8	1700	9	41	1400	8	30
29	650	5	8.8	1390	8	30	1200	6	19
30	567	4	6.1	1150	7	22	1030	5	14
31	544	4	5.9	---	---	---	912	4	9.8
TOTAL	36539	---	4482.1	26955	---	665.4	24481	---	931.8
		JANUARY			FEBRUARY			MARCH	
1	799	4	8.6	330	12	11	230	4	2.5
2	737	4	8.0	320	14	12	220	4	2.4
3	709	3	5.7	300	12	9.7	220	4	2.4
4	651	3	5.3	320	10	8.6	220	5	3.0
5	625	3	5.1	300	10	8.1	236	6	3.8
6	565	3	4.6	290	9	7.0	237	7	4.5
7	531	3	4.3	290	8	6.3	225	6	3.6
8	520	3	4.2	310	8	6.7	237	6	3.8
9	507	4	5.5	330	8	7.1	330	7	6.2
10	481	5	6.5	300	6	4.9	277	8	6.0
11	510	6	8.3	290	6	4.7	308	8	6.7
12	910	28	69	270	5	3.6	253	8	5.5
13	617	7	12	250	4	2.7	251	8	5.4
14	580	6	9.4	240	4	2.6	289	8	6.2
15	639	5	8.6	250	3	2.0	307	8	6.6
16	601	5	8.1	270	3	2.2	296	7	5.6
17	575	5	7.8	250	6	4.1	571	29	98
18	555	5	7.5	230	6	3.7	3310	168	1560
19	553	5	7.5	220	6	3.6	2140	43	248
20	514	5	6.9	322	6	5.2	1520	22	90
21	494	5	6.7	279	5	3.8	3810	147	2640
22	495	5	6.7	318	8	6.9	5850	133	2100
23	491	5	6.6	381	12	12	3300	35	312
24	455	5	6.1	390	11	12	2330	18	113
25	430	6	7.0	319	10	8.6	2250	21	128
26	410	12	13	303	7	5.7	1780	16	77
27	400	20	22	257	4	2.8	1500	12	49
28	387	10	10	240	5	3.2	1290	11	38
29	370	8	8.0	235	4	2.5	1600	20	86
30	350	10	9.5	---	---	---	1580	13	55
31	340	11	10	---	---	---	1550	13	54
TOTAL	16801	---	308.5	8404	---	173.3	38517	---	7722.2

SCHUYLKILL RIVER BASIN

01470500 SCHUYLKILL RIVER AT BERNE, PA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L) APRIL	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L) MAY	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L) JUNE	SEDIMENT DISCHARGE (TONS/DAY)
1	1780	13	62	1660	18	81	600	15	24
2	1770	14	67	1450	15	59	525	11	16
3	1640	12	53	1370	13	48	472	9	11
4	1610	14	61	1150	11	34	530	10	14
5	1380	12	45	1000	9	24	430	9	10
6	1160	11	34	920	9	22	385	8	8.3
7	1030	10	28	858	8	19	389	8	8.4
8	955	11	28	779	8	17	441	13	15
9	2300	61	494	713	8	15	364	12	12
10	2880	47	365	665	7	13	482	14	18
11	2310	18	112	626	7	12	382	11	11
12	1900	17	87	827	20	63	356	8	7.7
13	1620	12	52	2120	60	358	333	9	8.1
14	1800	17	83	1740	18	85	320	7	6.0
15	2210	26	155	1380	14	52	308	7	5.8
16	1990	16	86	1160	12	38	300	8	6.5
17	1690	11	50	1010	10	27	286	7	5.4
18	1450	10	39	936	10	25	275	7	5.2
19	1280	9	31	861	11	26	275	7	5.2
20	1110	9	27	809	10	22	294	7	5.6
21	994	9	24	939	18	46	282	7	5.3
22	908	9	22	868	12	28	251	6	4.1
23	817	8	18	704	10	19	238	6	3.9
24	757	8	16	641	10	17	248	7	4.7
25	703	7	13	599	9	15	238	6	3.9
26	665	8	14	544	8	12	231	4	2.5
27	697	12	23	503	8	11	225	4	2.4
28	1220	30	99	488	8	11	212	4	2.3
29	2090	50	282	475	8	10	212	6	3.4
30	1930	25	130	454	9	11	320	13	11
31	---	---	---	462	9	11	---	---	---
TOTAL	44646	---	2600	28711	---	1231	10204	---	246.7
		JULY			AUGUST			SEPTEMBER	
1	231	9	5.6	180	8	3.9	110	3	.89
2	212	8	4.6	161	8	3.5	110	4	1.2
3	205	8	4.4	271	18	13	100	5	1.4
4	212	8	4.6	199	7	3.8	97	5	1.3
5	205	8	4.4	167	5	2.3	97	4	1.0
6	275	15	11	155	6	2.5	85	4	.92
7	205	12	6.6	155	8	3.3	78	3	.63
8	199	10	5.4	155	6	2.5	65	4	.70
9	199	10	5.4	155	5	2.1	72	4	.78
10	186	8	4.0	148	8	3.2	135	7	2.6
11	186	9	4.5	174	7	3.3	110	4	1.2
12	193	7	3.6	218	11	6.5	78	3	.63
13	174	6	2.8	180	7	3.4	91	4	.98
14	167	5	2.3	148	6	2.4	104	4	1.1
15	174	4	1.9	148	5	2.0	148	21	8.4
16	212	12	6.9	148	5	2.0	129	7	2.4
17	302	21	17	129	6	2.1	116	4	1.3
18	238	11	7.1	116	4	1.3	148	6	2.4
19	186	9	4.5	123	4	1.3	123	4	1.3
20	174	8	3.8	123	4	1.3	110	4	1.2
21	155	7	2.9	116	5	1.6	97	3	.79
22	167	6	2.7	129	6	2.1	91	3	.74
23	299	14	11	129	5	1.7	97	3	.79
24	275	12	8.9	129	5	1.7	78	3	.63
25	212	7	4.0	110	6	1.8	91	5	1.2
26	186	5	2.5	110	6	1.8	110	5	1.5
27	167	5	2.3	110	5	1.5	91	3	.74
28	155	7	2.9	105	6	1.7	78	3	.63
29	180	9	4.4	150	4	1.6	72	3	.58
30	186	8	4.0	110	3	.89	97	3	.79
31	167	9	4.1	110	3	.89	---	---	---
TOTAL	6284	---	160.1	4561	---	82.98	3008	---	40.72

01470500 SCHUYLKILL RIVER AT BERNE, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	243	332	234	270	486	---	210	217	440	594	649	765
2	195	344	248	276	511	---	214	232	413	592	652	771
3	189	312	258	301	524	---	202	238	383	593	669	775
4	168	239	273	319	541	---	228	253	368	581	684	766
5	181	216	271	351	545	601	231	268	405	574	625	771
6	175	217	276	412	522	560	226	260	429	548	657	759
7	183	229	300	431	511	518	229	270	439	556	676	748
8	193	245	325	460	537	521	239	298	448	524	689	745
9	208	263	336	318	549	502	233	311	449	548	696	738
10	233	276	335	445	569	501	191	321	445	556	706	689
11	261	295	319	457	569	481	187	354	451	559	705	682
12	264	290	315	436	550	450	210	351	444	570	704	682
13	276	291	333	417	562	463	209	259	449	572	708	689
14	280	286	335	379	557	457	240	217	439	583	719	713
15	289	308	370	387	597	483	219	229	460	594	726	698
16	297	323	366	370	568	443	215	245	478	670	724	711
17	304	323	344	393	580	443	226	260	490	579	701	774
18	323	331	323	405	599	294	231	292	502	574	680	779
19	338	332	341	415	---	181	257	295	492	594	672	793
20	347	341	365	428	595	189	270	278	476	605	682	781
21	342	334	359	428	577	189	284	307	492	624	689	761
22	---	346	439	438	607	134	287	324	543	622	698	764
23	353	367	437	416	579	150	294	322	557	618	670	769
24	345	363	431	390	568	172	326	336	577	610	750	766
25	344	361	408	410	546	187	352	338	584	576	771	758
26	338	343	183	434	547	209	365	339	600	597	778	769
27	335	209	191	436	510	226	365	339	582	614	785	748
28	350	[illegible]	217	444	504	254	---	345	591	629	778	721
29	357	203	236	447	553	257	---	344	614	633	764	717
30	338	221	249	431	---	257	---	365	603	631	756	---
31	335	---	284	449	---	239	---	399	---	638	755	---
MEAN	279	291	313	400	552	347	250	297	488	592	707	745

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.0	11.0	5.0	5.0	2.0	---	10.0	14.0	21.0	27.0	28.0	30.0
2	17.0	13.0	5.0	4.0	3.0	---	10.0	15.0	23.0	28.0	28.0	29.0
3	18.0	11.0	4.0	4.0	4.0	---	12.0	17.0	23.0	25.0	29.0	25.0
4	17.0	10.0	5.0	4.0	3.0	---	12.0	17.0	23.0	30.0	31.0	29.0
5	17.0	9.0	5.0	4.0	2.0	4.0	11.0	19.0	23.0	27.0	33.0	28.0
6	15.0	9.0	5.0	4.0	2.0	6.0	12.0	19.0	21.0	28.0	30.0	29.0
7	15.0	9.0	7.0	3.0	4.0	5.0	14.0	19.0	25.0	28.0	30.0	27.0
8	13.0	8.0	6.0	3.0	5.0	5.0	13.0	16.0	25.0	25.0	31.0	26.0
9	14.0	10.0	5.0	2.0	4.0	9.0	14.0	15.0	20.0	28.0	30.0	26.0
10	11.0	11.0	5.0	3.0	4.0	9.0	13.0	15.0	18.0	28.0	29.0	27.0
11	11.0	10.0	6.0	4.0	4.0	8.0	13.0	15.0	20.0	25.0	29.0	24.0
12	11.0	10.0	8.0	5.0	4.0	9.0	13.0	15.0	22.0	28.0	28.0	25.0
13	11.0	10.0	6.0	3.0	5.0	3.0	14.0	18.0	24.0	30.0	30.0	20.0
14	10.0	10.0	5.0	4.0	3.0	3.0	11.0	16.0	23.0	30.0	27.0	24.0
15	12.0	9.0	5.0	5.0	3.0	7.0	11.0	16.0	25.0	28.0	26.0	25.0
16	13.0	9.0	5.0	6.0	4.0	8.0	10.0	17.0	24.0	32.0	24.0	23.0
17	11.0	10.0	4.0	5.0	4.0	6.0	10.0	15.0	25.0	30.0	28.0	23.0
18	14.0	10.0	3.0	6.0	3.0	5.0	11.0	15.0	24.0	31.0	23.0	22.0
19	12.0	10.0	2.0	5.0	---	5.0	14.0	16.0	24.0	32.0	27.0	25.0
20	15.0	10.0	2.0	5.0	5.0	8.0	15.0	18.0	21.0	32.0	29.0	22.0
21	16.0	11.0	2.0	5.0	7.0	9.0	17.0	18.0	20.0	32.0	24.0	25.0
22	---	10.0	4.0	4.0	4.0	6.0	15.0	20.0	25.0	28.0	23.0	22.0
23	17.0	12.0	5.0	4.0	6.0	9.0	15.0	23.0	25.0	28.0	25.0	26.0
24	14.0	12.0	6.0	3.0	6.0	8.0	17.0	22.0	25.0	30.0	27.0	24.0
25	13.0	14.0	7.0	2.0	7.0	7.0	16.0	23.0	29.0	30.0	30.0	19.0
26	11.0	15.0	8.0	3.0	6.0	8.0	14.0	22.0	29.0	30.0	29.0	23.0
27	12.0	12.0	5.0	4.0	4.0	8.0	13.0	20.0	30.0	30.0	30.0	20.0
28	10.0	10.0	6.0	4.0	4.0	8.0	---	21.0	28.0	30.0	28.0	20.0
29	10.0	8.0	6.0	3.0	4.0	9.0	---	19.0	26.0	28.0	28.0	18.0
30	10.0	6.0	6.0	2.0	---	10.0	---	20.0	25.0	30.0	29.0	23.0
31	10.0	---	6.0	2.0	---	8.0	---	20.0	---	28.0	30.0	---
MEAN	13.0	10.5	5.0	4.0	4.0	7.0	13.0	18.0	24.0	29.0	28.0	24.5

01470720 MAIDEN CREEK TRIBUTARY AT LENHARTSVILLE, PA

LOCATION.--Lat 40°34'23", long 75°52'34", Berks County, Hydrologic Unit 02040203, on left bank 60 ft (18 m) downstream from culvert on Interstate Highway 78, 0.5 mi (0.8 km) upstream from mouth, and 0.5 mi (0.8 km) east of Lenhartsville.

DRAINAGE AREA.--7.46 mi^2 (19.32 km^2).

PERIOD OF RECORD.--Annual maximum and occasional discharge measurements, water years 1962-65. October 1965 to current year.

REVISED RECORDS.--WDR PA-72: 1967(M), 1969-71(M).

GAGE.--Water-stage recorder and masonry control. Datum of gage is 368.78 ft (112.404 m) National Geodetic Vertical Datum of 1929. July 12, 1961, to Sept. 15, 1965, crest-stage gage at site 60 ft (18 m) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--15 years, 12.6 ft^3/s (0.357 m^3/s), 22.99 in/yr (584 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,530 ft^3/s (43.3 m^3/s) June 22, 1972, gage height, 6.46 ft (1.969 m), from peak-stage indicator, from rating curve extended above 280 ft^3/s (7.93 m^3/s) on basis of computation of peak flow through culvert; maximum gage height, 6.7 ft (2.04 m) Feb. 8, 1965, from floodmark; no flow on many days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 485 ft^3/s (13.7 m^3/s) Oct. 1, gage height, 4.47 ft (1.362 m); no flow part of August 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	5.5	14	12	3.9	4.2	32	40	6.4	1.5	1.2	.26
2	112	7.0	12	10	3.8	3.8	39	28	6.7	1.3	.96	.13
3	73	13	10	9.2	3.7	3.5	35	21	6.4	1.5	.96	.34
4	48	9.7	9.2	8.4	3.6	3.5	34	16	5.5	1.3	.85	.20
5	45	9.7	8.8	8.0	3.5	4.2	24	14	4.5	1.9	.75	.34
6	34	9.7	8.4	9.7	3.5	4.0	21	12	4.2	2.9	1.1	.53
7	30	9.7	8.8	7.3	3.5	3.5	18	11	4.5	1.9	.85	.20
8	24	8.8	7.3	6.7	3.5	5.0	16	9.7	5.8	1.9	.65	.13
9	21	8.4	6.7	6.7	3.5	5.5	24	8.4	5.2	1.9	.43	.13
10	24	12	6.4	5.5	3.5	4.7	21	7.3	6.1	1.8	.53	.53
11	22	9.7	6.1	9.7	3.5	6.1	21	7.7	4.7	1.6	.96	.43
12	24	10	5.8	13	3.5	4.2	20	12	4.0	1.5	.96	.34
13	21	10	12	17	3.5	3.8	18	14	3.5	1.2	.65	.34
14	18	11	9.2	8.8	3.5	6.4	25	9.7	3.3	1.2	.53	.85
15	15	11	8.4	9.2	4.0	6.4	28	8.4	3.1	1.2	.85	1.9
16	14	11	8.0	8.0	5.0	8.0	29	7.7	3.1	1.6	.96	.85
17	12	10	9.1	7.3	4.5	30	24	7.3	2.8	2.9	.65	.85
18	11	9.7	8.0	7.7	4.2	63	20	8.0	2.6	1.8	.65	1.3
19	9.7	8.8	7.8	7.7	4.0	47	16	7.0	2.4	1.5	.85	.85
20	8.8	8.0	7.6	6.7	3.8	34	13	6.4	2.6	1.3	.53	.75
21	8.4	7.7	7.4	6.4	3.5	63	12	12	2.4	1.2	.34	.85
22	8.0	7.3	7.3	6.4	6.7	75	9.7	7.3	2.1	1.2	.43	.75
23	8.0	7.0	8.0	6.4	16	52	8.8	6.4	2.1	2.1	.53	.53
24	9.7	6.7	10	6.7	9.2	40	8.0	6.1	1.8	1.3	.26	.34
25	7.0	7.0	43	5.8	7.3	37	7.7	5.8	1.8	1.1	.13	.65
26	6.7	19	44	5.8	5.8	32	7.0	5.0	1.6	.96	.20	1.2
27	6.4	19	34	5.5	5.5	27	15	4.7	1.6	.96	.13	.53
28	8.0	21	25	5.0	4.5	22	27	4.5	1.5	.96	.07	.53
29	6.7	18	20	4.5	4.3	27	73	4.5	1.5	1.2	.13	.53
30	6.1	16	16	4.2	---	21	60	4.2	1.9	1.1	.26	.65
31	5.8	---	14	4.0	---	26	---	4.7	---	.96	.34	---
TOTAL	775.3	321.4	402.3	239.3	138.3	672.8	706.2	320.8	105.7	46.74	18.69	17.81
MEAN	25.0	10.7	13.0	7.72	4.77	21.7	23.5	10.3	3.52	1.51	.60	.59
MAX	128	21	44	17	16	75	73	40	6.7	2.9	1.2	1.9
MIN	5.8	5.5	5.8	4.0	3.5	3.5	7.0	4.2	1.5	.96	.07	.13
CFSM	3.35	1.43	1.74	1.04	.64	2.91	3.15	1.38	.47	.20	.08	.08
IN.	3.87	1.60	2.01	1.19	.69	3.35	3.52	1.60	.53	.23	.09	.09

CAL YR 1979 TOTAL 6927.00 MEAN 19.0 MAX 344 MIN 1.4 CFSM 2.55 IN 34.54
WTR YR 1980 TOTAL 3765.34 MEAN 10.3 MAX 128 MIN .07 CFSM 1.38 IN 18.77

01470756 MAIDEN CREEK AT VIRGINVILLE, PA

LOCATION.--Lat 40°30'51", long 75°53'00", Berks County, Hydrologic Unit 02040203, on right bank 0.9 mi (1.4 km) downstream from Sacony Creek, 0.9 mi (1.4 km) southwest of Virginville, and 1.0 mi (1.6 km) upstream from Moselem Creek.

DRAINAGE AREA.--159 mi^2 (412 km^2).

PERIOD OF RECORD.--January 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 310 ft (94.5 m), from topographic map.

REMARKS.--Records fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--7 years, 294 ft^3/s (8.326 m^3/s), 25.15 in/yr (639 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,420 ft^3/s (238 m^3/s) Jan. 24, 1979, gage height, 12.67 ft (3.862 m); minimum, 11 ft^3/s (0.31 m^3/s) Aug. 25, Sept. 24, 25, 1980; minimum gage height, 1.88 ft (0.573 m) Aug. 25, 1980.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1972 reached a stage of 17.2 feet (5.24 m), from floodmarks, discharge, about 14,000 ft^3/s (396 m^3/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft^3/s (56.6 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 1	unknown	unknown		unknown		Mar. 21	2230	*3,080	87.2	*7.22	2.201
Mar. 18	1030	2,290	64.9	6.20	1.890						

Minimum discharge, 11 ft^3/s (0.31 m^3/s) Aug. 25, Sept. 24, 25; minimum gage height, 1.88 ft (0.573 m) Aug. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2500	130	282	260	98	100	791	749	153	58	31	17
2	1200	150	256	238	96	90	802	578	165	48	31	16
3	1500	300	221	221	94	80	682	526	161	48	29	15
4	1000	250	213	193	92	80	677	409	165	53	29	15
5	867	220	201	189	90	80	521	350	117	48	29	17
6	894	210	193	177	90	86	435	314	103	113	27	17
7	687	200	213	189	90	77	379	290	110	53	29	16
8	545	190	177	157	90	93	338	269	153	46	26	14
9	462	193	157	161	90	153	647	238	117	46	23	14
10	531	260	150	169	90	113	637	213	185	44	22	42
11	494	251	146	181	90	153	512	209	124	42	23	16
12	480	260	139	396	90	110	453	306	103	42	26	17
13	444	234	221	229	90	96	422	692	93	40	26	16
14	367	265	265	205	90	135	540	427	86	38	23	17
15	326	238	189	213	100	157	703	330	83	36	24	32
16	298	238	181	193	110	146	598	282	86	46	29	27
17	273	221	205	173	100	427	494	247	77	80	24	21
18	251	209	180	169	95	1970	422	251	68	53	22	55
19	229	197	170	177	90	1060	367	234	68	40	23	21
20	213	185	170	161	90	687	326	213	71	40	22	15
21	201	177	170	150	90	1540	294	314	68	36	19	14
22	189	165	170	142	120	1920	260	247	60	36	17	14
23	185	161	169	146	265	1020	238	193	58	53	17	13
24	265	157	225	139	229	744	221	177	55	48	17	11
25	189	157	967	130	161	933	209	169	55	40	12	11
26	169	422	861	125	128	692	193	146	51	36	14	17
27	157	583	607	120	120	574	269	135	48	34	13	16
28	180	435	467	115	110	480	807	128	46	32	13	12
29	230	375	388	110	100	642	1380	121	48	31	13	12
30	180	322	334	105	---	564	1040	117	110	31	13	12
31	150	---	294	100	---	593	---	121	---	31	14	---
TOTAL	15656	7355	8581	5433	3188	15595	15657	8995	2887	1424	680	552
MEAN	505	245	277	175	110	503	522	290	96.2	45.9	21.9	18.4
MAX	2500	583	967	396	265	1970	1380	749	185	113	31	55
MIN	150	130	139	100	90	77	193	117	46	31	12	11
CFSM	3.18	1.54	1.74	1.10	.69	3.16	3.28	1.82	.61	.29	.14	.12
IN.	3.66	1.72	2.01	1.27	.75	3.65	3.66	2.10	.68	.33	.16	.13

CAL YR 1979 TOTAL 133626 MEAN 366 MAX 3910 MIN 37 CFSM 2.30 IN 31.26
WTR YR 1980 TOTAL 86003 MEAN 235 MAX 2500 MIN 11 CFSM 1.48 IN 20.12

01470779 TULPEHOCKEN CREEK NEAR BERNVILLE, PA

LOCATION.--Lat 40°24'48", long 76°10'19", Berks County, Hydrologic Unit 02040203, on left bank 30 ft (9.1 m) downstream from Kricks Mill Bridge, 0.4 mi (0.6 km) upstream from Mill Creek, and 3.5 mi (5.6 km) west of Bernville.

DRAINAGE AREA.--66.5 mi^2 (172.2 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 311.26 ft (94.872 m) Pennsylvania Department of Transportation Datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--5 years, 127 ft^3/s (3.597 m^3/s), 25.92 in/yr (658 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,560 ft^3/s (157 m^3/s) Jan. 24, 1979, gage height, 10.16 ft (3.097 m), from rating curve extended above 740 ft^3/s (21 m^3/s) on basis of contracted-opening measurement of peak flow; minimum, 31 ft^3/s (0.88 m^3/s) Feb. 6, 1977, gage height, 1.59 ft (0.485 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1972 reached a stage of about 9.5 ft (2.90 m), from information by local resident, discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,610 ft^3/s (45.6 m^3/s) Oct. 1, gage height, 5.98 ft (1.823 m); minimum, 33 ft^3/s (0.93 m^3/s) Sept. 21, 25, gage height, 1.61 ft (0.491 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	645	87	108	88	68	52	205	153	84	78	58	50
2	326	90	109	88	66	52	169	138	83	77	59	39
3	452	109	105	87	65	52	157	135	90	76	63	40
4	309	92	105	84	64	56	169	124	100	77	54	38
5	295	88	92	84	63	59	151	119	94	67	48	39
6	264	85	90	83	62	52	138	116	91	63	56	59
7	216	84	90	83	61	48	131	116	91	60	48	41
8	189	83	84	81	61	53	126	111	114	60	46	40
9	181	81	83	80	60	72	200	105	92	60	54	39
10	196	98	83	78	59	56	189	101	92	59	55	38
11	179	101	81	84	57	62	167	97	84	57	50	36
12	167	106	80	108	57	64	159	111	78	64	52	35
13	157	100	100	84	56	71	157	140	75	69	49	41
14	135	100	97	84	56	83	165	106	73	68	47	50
15	126	85	84	85	56	78	181	97	72	55	46	49
16	121	83	83	83	64	85	155	103	83	80	53	36
17	116	78	81	80	63	153	135	103	80	105	57	37
18	122	77	76	81	64	194	126	106	83	72	54	59
19	121	76	77	85	61	136	121	105	81	73	44	39
20	117	75	77	80	59	124	116	103	80	76	42	36
21	116	73	76	78	59	317	113	138	77	73	41	36
22	114	72	77	77	72	256	113	113	76	64	40	35
23	111	72	78	78	81	198	113	98	64	72	63	34
24	124	71	78	75	69	177	111	95	60	62	62	33
25	98	71	161	76	66	198	109	103	55	58	52	35
26	94	146	122	76	63	161	103	101	54	57	45	39
27	90	131	111	75	60	147	122	98	51	69	39	42
28	95	109	95	75	58	138	173	97	54	69	38	52
29	110	101	91	73	55	179	191	87	94	58	38	50
30	95	97	88	71	---	173	151	83	77	55	44	39
31	88	---	87	69	---	181	---	83	---	53	54	---
TOTAL	5569	2721	2849	2513	1805	3727	4416	3385	2382	2086	1551	1236
MEAN	180	90.7	91.9	81.1	62.2	120	147	109	79.4	67.3	50.0	41.2
MAX	645	146	161	108	81	317	205	153	114	105	63	59
MIN	88	71	76	69	55	48	103	83	51	53	38	33
CFSM	2.71	1.36	1.38	1.22	.94	1.81	2.21	1.64	1.19	1.01	.75	.62
IN.	3.12	1.52	1.59	1.41	1.01	2.08	2.47	1.89	1.33	1.17	.87	.69

CAL YR 1979 TOTAL 54279 MEAN 149 MAX 2060 MIN 44 CFSM 2.24 IN 30.36
WTR YR 1980 TOTAL 34240 MEAN 93.6 MAX 645 MIN 33 CFSM 1.41 IN 19.15

01470779 TULPEHOCKEN CREEK NEAR BERNVILLE, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1977 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 26°C Aug. 8, 1980; minimum, freezing point on several days during winter months.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.0	15.5	16.0	12.0	10.5	11.0	6.5	4.5	5.5	7.0	5.5	6.5
2	16.5	15.5	16.0	12.5	12.0	12.0	6.5	5.0	5.5	7.0	4.5	6.0
3	16.5	15.5	16.0	12.5	11.5	12.5	5.5	4.0	4.5	7.0	5.5	6.0
4	16.0	14.5	15.5	12.0	9.5	10.5	7.0	5.0	6.0	6.0	4.0	5.0
5	15.5	14.5	15.0	10.5	9.0	10.0	7.0	5.5	6.5	5.0	3.5	4.5
6	14.5	12.5	13.5	10.5	9.0	9.5	7.5	6.5	7.0	5.5	3.0	4.5
7	14.0	12.5	13.0	10.5	10.0	10.5	8.5	7.5	8.0	5.0	3.0	4.0
8	13.0	11.0	12.0	10.5	9.0	9.5	7.5	6.5	7.0	5.0	3.5	4.5
9	13.0	12.5	13.0	11.0	9.5	10.5	6.5	5.0	5.5	4.5	3.5	4.0
10	12.5	10.0	11.5	12.0	11.0	11.5	8.0	4.5	6.0	6.5	3.5	5.5
11	---	---	---	12.0	10.5	11.0	9.0	8.0	8.5	7.0	5.0	6.0
12	---	---	---	11.0	10.0	10.5	9.5	9.0	9.0	7.0	5.0	6.5
13	---	---	---	11.0	10.0	10.5	9.5	9.0	9.5	5.5	3.0	4.0
14	---	---	---	10.5	9.0	10.0	9.5	8.5	9.0	6.0	4.0	5.0
15	---	---	---	9.0	8.0	8.5	9.0	7.5	8.0	7.5	5.5	7.0
16	---	---	---	9.5	8.0	9.0	8.5	7.5	8.0	7.5	5.5	7.0
17	---	---	---	9.0	7.0	8.5	9.0	7.0	8.0	7.0	6.0	6.5
18	---	---	---	10.0	8.0	9.0	7.5	6.0	7.0	7.0	6.5	6.5
19	---	---	---	10.0	8.5	9.5	7.0	6.5	7.0	7.0	6.0	6.5
20	---	---	---	10.5	9.0	9.5	7.0	6.0	6.5	6.5	5.0	5.5
21	---	---	---	10.0	9.0	9.5	7.0	6.0	6.5	5.5	3.5	4.5
22	---	---	---	10.5	9.5	10.0	7.5	6.5	7.0	4.5	3.5	4.0
23	---	---	---	12.0	9.5	10.5	8.0	7.0	7.5	5.5	4.0	5.0
24	---	---	---	12.5	12.0	12.0	8.5	8.0	8.5	5.0	.5	2.5
25	---	---	---	13.0	12.5	12.5	9.0	8.5	9.0	2.5	1.0	2.0
26	---	---	---	15.5	13.0	14.0	9.0	8.5	9.0	3.0	2.0	2.5
27	---	---	---	13.0	10.5	11.5	8.5	8.0	8.0	---	---	---
28	---	---	---	10.5	9.0	9.5	8.0	7.0	8.0	---	---	---
29	---	---	---	9.0	6.0	7.5	8.5	7.0	7.5	---	---	---
30	11.0	10.5	11.0	6.0	5.0	5.5	8.5	7.0	7.5	---	---	---
31	11.0	10.0	10.5	---	---	---	8.0	6.5	7.0	---	---	---
MONTH	17.0	10.0	13.5	15.5	5.0	10.0	9.5	4.0	7.5	7.5	.5	5.0

01470779 TULPEHOCKEN CREEK NEAR BERNVILLE, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1										---	---	---
2										---	---	---
3										---	---	---
4										---	---	---
5										---	---	---
6										---	---	---
7										---	---	---
8										---	---	---
9										---	---	---
10										---	---	---
11										---	---	---
12										---	---	---
13										---	---	---
14										---	---	---
15										---	---	---
16										---	---	---
17										---	---	---
18										---	---	---
19										---	---	---
20										---	---	---
21										---	---	---
22										---	---	---
23										---	---	---
24										---	---	---
25										---	---	---
26										---	---	---
27										16.0	15.5	---
28										16.5	14.5	15.5
29										17.5	14.5	16.0
30										18.0	16.0	17.0
31										18.0	17.0	17.5
MONTH										18.0	14.5	16.5

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	20.0	15.0	17.5	17.5	17.5	17.5	23.5	18.5	21.5	23.0	21.5	22.5
2	20.0	19.0	19.5	18.5	17.5	18.0	24.0	22.0	23.5	25.5	22.0	23.5
3	20.0	17.5	19.0	20.0	18.0	19.0	24.0	22.5	23.0	24.5	22.5	23.5
4	19.5	15.5	17.0	20.0	18.0	18.5	24.0	21.0	22.5	23.5	21.0	22.0
5	17.5	16.5	17.0	21.5	18.0	20.0	25.5	23.0	24.0	23.5	21.5	22.5
6	17.5	16.0	16.5	21.0	19.5	20.0	24.5	19.5	23.0	22.0	18.5	20.5
7	20.5	16.0	17.5	21.0	19.0	20.0	24.5	22.5	23.5	23.0	20.5	21.5
8	20.5	17.0	20.0	20.5	18.5	19.5	26.0	23.0	24.0	21.0	19.5	20.0
9	17.0	15.5	16.0	20.5	18.5	19.5	25.5	24.0	25.0	21.0	18.5	19.5
10	15.5	14.5	15.0	22.0	20.5	21.0	24.5	21.5	23.0	22.0	20.0	20.5
11	16.0	14.0	15.0	23.0	20.5	21.0	24.0	22.5	23.0	21.0	18.0	19.5
12	17.0	15.0	16.0	23.0	21.0	22.0	23.5	22.0	23.0	21.0	17.5	19.0
13	18.5	16.0	17.0	21.5	20.0	21.0	24.0	21.0	22.5	21.5	18.0	19.5
14	19.5	17.5	18.5	22.0	19.5	21.0	22.5	20.5	21.5	21.0	20.0	21.0
15	20.0	19.0	19.5	22.0	20.0	21.5	23.0	21.5	22.0	20.5	18.0	19.5
16	20.0	18.0	19.0	23.0	21.5	---	21.5	20.0	20.5	18.0	16.5	17.0
17	18.5	17.0	18.0	---	---	---	20.5	18.0	19.5	19.0	16.5	17.5
18	18.0	17.0	17.5	---	---	---	20.5	18.5	19.5	19.5	17.0	18.0
19	18.0	16.5	17.5	---	---	---	21.5	18.5	19.5	20.0	17.0	18.5
20	18.5	17.0	17.5	---	---	---	23.0	20.5	21.5	19.5	17.0	18.0
21	18.5	16.0	17.0	---	---	---	22.5	21.0	22.0	21.0	18.0	19.5
22	20.0	17.5	18.5	---	---	---	21.0	19.5	20.5	23.0	20.0	21.0
23	20.5	18.5	19.0	24.0	20.5	22.0	21.0	19.0	20.0	22.5	20.5	21.5
24	21.0	19.5	20.0	23.0	21.0	21.5	21.0	18.5	20.0	20.5	18.0	19.5
25	21.5	20.0	20.5	23.5	21.0	22.0	22.0	20.5	21.0	18.0	17.0	17.5
26	22.0	21.0	21.5	24.5	22.0	23.0	22.5	21.0	21.5	17.5	16.0	16.5
27	22.5	21.0	21.5	24.0	23.0	23.5	24.0	21.0	22.5	16.0	13.5	15.0
28	22.5	21.0	21.5	23.5	20.0	22.5	24.0	22.0	23.0	15.5	13.0	14.0
29	22.0	18.0	19.0	23.5	20.0	21.5	24.0	22.0	23.0	16.5	14.5	15.5
30	20.5	17.5	18.0	24.0	21.5	22.5	24.5	22.0	23.0	17.5	16.0	16.5
31	---	---	---	24.0	21.0	22.0	24.0	22.5	23.5	---	---	---
MONTH	22.5	14.0	18.0	24.5	17.5	21.0	26.0	18.0	22.0	25.5	13.0	19.5

01470960 TULPEHOCKEN CREEK AT BLUE MARSH DAMSITE NEAR READING, PA

LOCATION.--Lat 40°22'14", long 76°01'32", Berks County, Hydrologic Unit 02040203, on right bank 1 mi (1.6 km) upstream from Rebers Bridge and Plum Creek, 1 mi (1.6 km) east of Blue Marsh, 3 mi (4.8 km) north of Sinking Spring, and 5.5 mi (8.8 km) northwest of Reading. Water-quality sampling site at Rebers bridge 1.0 mi (1.6 km) downstream.

DRAINAGE AREA.--175 mi^2 (453 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1965 to current year.

REVISED RECORD.--WDR PA-72: 1969-1971 (M).

GAGE.--Water-stage recorder. Datum of gage is 230.06 ft (70.122 m) Western Berks Water Authority datum. Prior to Nov. 25, 1974, water-stage recorder at site 0.3 mi (0.5 km) downstream at same datum.

REMARKS.--Records good. Flow regulated by Blue Marsh Reservoir (station 01470870) 0.8 mi (1.3 km) upstream.

AVERAGE DISCHARGE.--15 years, 284 ft^3/s (8.043 m^3/s), 22.05 in/yr (560 mm/yr), adjusted for storage since April 1979.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,100 ft^3/s (456 m^3/s) June 22, 1972, gage height, 18.7 ft (5.70 m), from floodmarks, from rating curve extended above 3,000 ft^3/s (85.0 m^3/s) on basis of runoff comparison with downstream station; minimum since construction of dam, 5.8 ft^3/s (0.16 m^3/s) Nov. 17, 1977; minimum gage height, 1.45 ft (0.442 m) July 29, 30, 31, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,370 ft^3/s (67.1 m^3/s) Oct. 24, gage height, 5.88 ft (1.792 m); minimum discharge, 41 ft^3/s (1.16 m^3/s) Sept. 16; minimum gage height, 2.35 ft (0.716 m) many days during the year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	310	140	234	347	135	133	838	540	221	113	82	76
2	856	141	234	345	135	133	662	540	220	110	84	63
3	1220	142	273	268	135	116	500	484	192	113	84	62
4	1360	144	335	202	135	104	465	411	177	113	86	62
5	1430	143	312	191	135	105	461	277	162	113	88	60
6	1410	160	233	191	135	105	384	199	142	110	88	60
7	1390	206	233	174	135	104	268	227	132	110	88	62
8	1360	232	232	163	135	105	258	251	132	113	90	62
9	927	258	232	163	135	105	308	260	142	113	93	63
10	371	293	195	164	135	158	330	260	147	113	86	65
11	371	292	174	165	126	224	331	260	208	115	84	63
12	371	290	173	166	106	224	334	298	238	113	84	65
13	372	289	174	166	88	170	334	388	217	101	84	63
14	373	234	218	265	78	195	333	394	205	93	84	65
15	375	182	232	286	78	216	336	275	154	95	84	63
16	302	171	232	215	78	216	372	241	127	84	84	125
17	147	171	212	174	77	245	393	241	127	74	84	163
18	149	172	184	194	77	323	347	242	127	74	84	139
19	150	174	174	194	169	870	323	242	127	76	84	74
20	152	174	174	194	222	815	319	217	130	78	82	52
21	153	174	174	194	153	620	273	256	130	76	82	50
22	245	174	173	176	133	1250	236	278	127	78	82	55
23	856	174	174	166	133	1210	236	277	127	127	80	58
24	1080	174	174	166	134	510	236	279	115	244	80	86
25	378	175	176	166	164	517	152	232	110	223	80	149
26	512	210	287	165	189	634	78	185	110	134	78	174
27	505	237	352	165	171	628	79	141	113	106	78	163
28	517	277	351	165	143	525	81	239	113	88	76	165
29	657	504	351	134	133	329	155	238	110	86	76	104
30	531	490	348	99	---	331	422	227	110	84	76	47
31	145	---	348	147	---	635	---	221	---	80	76	---
TOTAL	18975	6597	7368	5970	3802	11855	9844	8820	4492	3350	2571	2558
MEAN	612	220	238	193	131	382	328	285	150	108	82.9	85.3
MAX	1430	504	352	347	222	1250	838	540	238	244	93	174
MIN	145	140	173	99	77	104	78	141	110	74	76	47
MEAN≠	517	240	239	185	131	392	412	277	152	101	65.2	47.8
CFSM≠	2.95	1.37	1.36	1.06	.75	2.24	2.36	1.58	.87	.58	.37	.27
IN.≠	3.40	1.53	1.57	1.22	.81	2.58	2.63	1.83	.97	.66	.43	.30

CAL YR 1979 TOTAL 134125 MEAN 367 MAX 3170 MIN 56 MEAN≠ 392 CFSM≠ 2.24 IN.≠ 30.45
WTR YR 1980 TOTAL 86202 MEAN 236 MAX 1430 MIN 47 MEAN≠ 231 CFSM≠ 1.32 IN.≠ 17.94

≠ Adjusted for change in contents in Blue Marsh Reservoir.

01470960 TULPEHOCKEN CREEK AT BLUE MARSH DAMSITE NEAR READING, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1968 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1968 to current year.

REMARKS.--Temperature recorder located at gaging station 1.0 mi (1.6 km) upstream from sampling site.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 34.0°C Oct. 2, 1968; minimum, freezing point on several days during Dec. 1970, Jan., Mar. 1971, Feb. 1975, Feb. 1979.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 23.5°C Sept. 2 and Sept. 6; minimum, 2.0°C several days during February.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SAMPLING DEPTH (FT)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
OCT										
02...	1430	--	430	290	7.4	17.0	--	--	--	--
23...	1435	--	1210	295	7.5	13.0	11.6	3.4	.060	3.5
APR										
01...	1430	--	835	295	8.0	7.0	--	4.5	.040	4.5
22...	1430	.5	235	320	8.7	12.5	14.0	4.1	.030	4.1
MAY										
21...	1115	5.0	279	297	7.3	13.0	9.6	6.3	.080	6.4
JUN										
17...	1638	1.0	127	337	7.3	17.4	8.8	4.2	.000	4.2
JUL										
22...	1415	1.0	82	410	7.1	21.0	8.2	2.6	.130	2.7
AUG										
18...	1615	.5	125	370	7.0	21.1	7.3	1.5	.040	1.5

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS NH4)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	PHOSPHORUS, TOTAL (MG/L AS PO4)
OCT									
02...	--	--	--	--	--	--	--	--	--
23...	.120	.15	.52	.64	4.1	18	.040	.00	.12
APR									
01...	.150	.18	.36	.51	5.0	22	.060	.09	.18
22...	.040	.05	.28	.32	4.4	20	.040	.03	.12
MAY									
21...	.220	.27	.22	.44	6.8	30	.040	.03	.12
JUN									
17...	.000	.00	.21	.21	4.4	20	.040	.03	.12
JUL									
22...	.280	.34	.33	.61	3.3	15	.020	.03	.06
AUG									
18...	.940	1.1	.36	1.3	2.8	12	.060	.06	.18

01470960 TULPEHOCKEN CREEK AT BLUE MARSH DAMSITE NEAR READING, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)
OCT									
02...	--	--	--	--	--	--	--	--	--
23...	.020	.000	5	0	5	60	1	10	0
APR									
01...	.030	.030	--	--	3	--	--	--	--
22...	.020	.010	5	--	--	--	--	--	--
MAY									
21...	.010	.010	4	--	--	--	--	--	--
JUN									
17...	.020	.010	--	--	5	60	2	10	--
JUL									
22...	.010	.010	10	--	--	--	--	--	--
AUG									
18...	.020	.020	--	--	--	--	--	--	--

DATE	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)	PHENOLS (UG/L)
OCT									
02...	--	--	--	0	--	--	--	--	--
23...	3	130	0	160	.1	0	0	3	5
APR									
01...	--	--	--	--	--	--	--	--	0
22...	--	--	--	--	--	--	--	--	3
MAY									
21...	--	--	--	--	--	--	--	--	2
JUN									
17...	0	20	0	850	.1	0	0	0	0
JUL									
22...	--	--	--	--	--	--	--	--	0
AUG									
18...	--	--	--	--	--	--	--	--	2

01470960 TULPEHOCKEN CREEK AT BLUE MARSH DAMSITE NEAR READING, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.5	17.5	17.5	12.0	11.5	11.5	8.5	8.5	8.5	4.0	4.0	4.0
2	18.0	17.0	17.5	12.0	11.5	12.0	8.5	8.0	8.5	4.0	4.0	4.0
3	17.5	17.0	17.5	12.0	11.0	11.5	8.0	7.5	8.0	4.0	3.5	4.0
4	17.5	17.0	17.5	11.5	11.0	11.0	7.5	7.5	7.5	4.0	3.5	3.5
5	17.5	17.0	17.0	11.0	11.0	11.0	7.5	7.5	7.5	4.0	3.5	4.0
6	17.5	17.0	17.0	11.0	10.5	11.0	7.5	7.0	7.5	3.5	3.5	3.5
7	17.0	16.5	17.0	11.0	11.0	11.0	7.5	7.5	7.5	3.5	3.0	3.5
8	16.5	16.0	16.0	10.5	10.5	10.5	7.5	7.0	7.5	3.0	3.0	3.0
9	16.0	16.0	16.0	11.0	10.5	10.5	7.0	7.0	7.0	3.5	3.0	3.0
10	15.5	15.0	15.5	11.0	10.5	10.5	7.0	7.0	7.0	3.0	2.5	3.0
11	15.0	14.5	14.5	11.0	10.5	10.5	7.0	7.0	7.0	3.5	3.0	3.0
12	14.0	14.0	14.0	10.5	10.0	10.5	7.0	7.0	7.0	3.5	2.5	3.0
13	14.0	13.5	14.0	10.5	10.0	10.0	7.0	7.0	7.0	3.0	2.5	3.0
14	13.5	13.0	13.0	10.0	9.5	10.0	7.0	6.5	6.5	3.0	3.0	3.0
15	13.0	13.0	13.0	9.5	9.5	9.5	6.5	6.5	6.5	3.5	3.0	3.0
16	13.0	12.5	13.0	9.5	9.0	9.5	6.5	6.5	6.5	3.5	3.0	3.0
17	13.0	12.5	12.5	9.0	9.0	9.0	6.5	5.5	5.5	3.5	3.0	3.5
18	13.0	12.5	12.5	9.5	9.0	9.0	5.5	5.0	5.0	3.5	3.5	3.5
19	13.0	12.5	12.5	9.5	9.0	9.0	5.0	4.5	5.0	3.5	3.5	3.5
20	13.0	12.5	12.5	9.5	9.0	9.0	4.5	4.0	4.5	3.5	3.0	3.5
21	13.0	12.5	13.0	9.5	9.0	9.0	4.0	4.0	4.0	3.5	3.0	3.0
22	13.5	12.0	13.0	9.0	9.0	9.0	4.0	4.0	4.0	3.5	3.0	3.5
23	13.5	12.0	12.5	9.0	9.0	9.0	4.0	4.0	4.0	3.5	3.0	3.5
24	13.5	12.5	13.0	9.5	9.0	9.0	4.0	4.0	4.0	2.5	2.5	2.5
25	13.0	12.5	12.5	10.0	9.0	9.5	4.5	4.0	4.5	2.5	2.5	2.5
26	12.5	12.5	12.5	10.5	9.0	10.0	4.5	4.5	4.5	2.5	2.5	2.5
27	12.5	12.0	12.5	10.5	9.5	10.0	4.5	4.0	4.0	3.0	2.5	2.5
28	12.0	12.0	12.0	10.0	9.5	10.0	4.5	4.0	4.0	3.0	2.5	3.0
29	12.0	12.0	12.0	9.5	9.0	9.5	4.0	4.0	4.0	3.0	2.5	3.0
30	12.0	11.5	12.0	9.0	8.5	9.0	4.0	4.0	4.0	3.0	2.5	2.5
31	12.0	11.0	11.5	---	---	---	4.0	4.0	4.0	3.0	2.5	2.5
MONTH	18.0	11.0	14.0	12.0	8.5	10.0	8.5	4.0	6.0	4.0	2.5	3.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.5	2.0	2.5	4.0	3.0	3.5	7.0	6.5	7.0	11.0	11.0	11.0
2	2.5	2.0	2.5	4.0	3.0	3.5	8.5	7.0	7.5	11.0	10.5	11.0
3	2.5	2.0	2.0	3.5	2.5	3.0	8.5	7.5	8.0	11.0	11.0	11.0
4	2.5	2.0	2.5	3.5	2.5	3.0	9.0	8.0	8.5	12.0	11.0	11.5
5	2.5	2.0	2.5	3.5	3.0	3.0	9.0	8.0	8.5	12.0	11.0	11.5
6	2.5	2.5	2.5	4.0	3.0	3.5	9.0	8.0	8.5	12.0	11.0	11.5
7	3.0	2.5	2.5	4.0	3.0	3.5	9.0	9.0	9.0	12.0	11.0	11.5
8	3.5	2.5	3.0	4.0	3.5	3.5	9.0	9.0	9.0	12.0	11.0	11.5
9	3.5	3.0	3.0	4.5	3.5	4.0	9.5	9.0	9.5	12.0	11.5	12.0
10	3.5	3.0	3.0	4.0	3.5	4.0	10.5	9.5	10.0	12.0	11.5	12.0
11	3.5	3.0	3.5	4.0	3.5	4.0	11.0	9.5	10.5	12.0	11.5	12.0
12	4.0	3.0	3.5	3.5	3.0	3.5	11.5	10.5	11.0	12.5	12.0	12.0
13	4.0	3.0	3.5	3.5	3.0	3.5	11.5	11.0	11.0	13.0	12.0	12.5
14	4.0	3.5	3.5	3.5	3.0	3.5	11.5	10.5	11.0	13.0	12.5	13.0
15	4.0	3.5	3.5	3.5	3.0	3.5	11.0	10.5	11.0	13.0	12.5	12.5
16	4.0	3.5	3.5	4.0	3.0	3.5	11.0	10.5	11.0	13.0	12.0	12.5
17	4.0	3.0	3.5	4.0	3.5	4.0	11.0	10.5	10.5	13.0	12.5	12.5
18	4.0	3.0	3.5	5.0	4.0	4.5	11.5	10.5	11.0	13.0	12.5	12.5
19	4.0	3.0	3.5	5.0	4.5	4.5	11.5	11.0	11.0	13.0	12.5	13.0
20	4.0	3.5	3.5	5.0	4.5	5.0	12.0	11.0	11.5	13.0	12.5	13.0
21	4.0	3.5	4.0	5.0	5.0	5.0	12.0	11.0	11.5	13.5	13.0	13.0
22	3.5	3.5	3.5	5.5	5.0	5.0	12.5	11.5	12.0	14.0	13.0	13.5
23	4.0	3.5	3.5	5.5	5.0	5.5	12.5	12.0	12.0	14.0	13.5	14.0
24	4.0	3.5	4.0	5.5	5.0	5.5	12.5	12.0	12.0	14.0	13.5	14.0
25	4.0	3.5	4.0	6.0	5.5	6.0	13.0	12.0	12.5	14.0	13.5	14.0
26	4.0	3.5	4.0	6.0	5.5	6.0	12.5	12.0	12.5	14.5	13.0	13.5
27	4.0	3.5	4.0	6.5	5.5	6.0	12.0	11.0	12.0	14.0	12.5	13.0
28	4.0	3.5	4.0	7.0	6.0	6.5	11.5	11.0	11.0	---	---	---
29	4.0	3.5	3.5	7.0	6.5	6.5	11.5	11.0	11.0	---	---	---
30	---	---	---	7.0	6.5	7.0	11.0	11.0	11.0	---	---	---
31	---	---	---	6.5	6.5	6.5	---	---	---	---	---	---
MONTH	4.0	2.0	3.5	7.0	2.5	4.5	13.0	6.5	10.5	14.5	10.5	12.5

01470960 TULPEHOCKEN CREEK AT BLUE MARSH DAMSITE NEAR READING, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1				---	---	---	21.5	20.0	20.5	23.0	21.5	22.0
2				---	---	---	21.0	20.0	20.5	23.5	21.5	22.0
3				---	---	---	21.5	20.5	20.5	23.0	21.0	22.0
4				---	---	---	21.0	20.0	20.5	22.5	21.0	21.5
5				---	---	---	21.5	20.5	21.0	23.0	21.5	22.0
6				---	---	---	21.0	20.0	20.5	23.5	21.5	22.0
7				---	---	---	21.5	20.0	20.5	22.5	21.0	21.5
8				---	---	---	22.0	20.5	21.0	22.5	21.0	21.5
9				19.5	18.5	19.0	21.5	20.5	21.0	22.5	21.0	21.5
10				19.5	18.5	19.0	21.0	20.5	20.5	22.5	21.0	21.5
11				20.0	18.5	19.0	22.0	20.5	21.0	22.0	20.5	21.0
12				20.0	18.5	19.0	22.0	20.5	21.0	22.5	21.0	21.5
13				19.5	18.0	18.5	21.5	20.5	21.0	22.5	21.0	21.5
14				20.0	18.0	18.5	22.0	20.5	21.0	22.0	21.0	21.5
15				20.0	18.0	19.0	21.5	20.5	21.0	22.0	21.0	21.5
16				21.0	18.5	19.5	21.0	20.5	21.0	22.0	21.0	21.5
17				21.0	19.5	20.0	22.0	20.0	21.0	22.5	21.0	21.5
18				21.0	19.0	20.0	21.0	20.5	21.0	22.0	21.0	21.5
19				21.0	19.0	20.0	22.5	21.0	21.5	21.5	21.0	21.0
20				21.0	19.0	20.0	22.5	21.0	21.5	22.0	20.5	21.5
21				21.0	19.0	20.0	22.0	20.5	21.0	23.0	21.5	22.0
22				21.0	19.0	20.0	21.0	21.0	21.0	23.0	21.0	22.0
23				20.5	19.5	20.0	22.5	21.0	21.5	22.0	21.0	21.0
24				21.0	20.0	20.5	22.5	21.0	21.5	21.0	20.5	21.0
25				21.0	20.0	20.5	22.5	20.5	21.5	21.5	21.0	21.0
26				21.0	20.0	20.0	22.0	21.0	21.5	22.0	21.0	21.5
27				21.0	19.5	20.0	22.0	21.0	21.5	21.0	20.5	21.0
28				21.0	19.5	20.0	22.0	21.0	21.5	21.0	20.5	20.5
29				21.0	20.0	20.5	22.5	21.0	21.5	21.0	20.5	20.5
30				21.0	20.0	20.5	22.5	21.0	21.5	20.5	20.0	20.5
31				21.0	20.0	20.5	22.5	21.0	22.0	---	---	---
MONTH				21.0	18.0	19.5	22.5	20.0	21.0	23.5	20.0	21.5

01471000 TULPEHOCKEN CREEK NEAR READING, PA

LOCATION.--Lat 40°22'08", long 75°58'46", Berks County, Hydrologic Unit 02040203, on right bank 15 ft (4.6 m) upstream from covered bridge, 1 mi (2 km) downstream from Cacoosing Creek, 2.5 mi (4.0 km) upstream from mouth, and 3.5 mi (5.6 km) northwest of square at Reading. Water-quality sampling site at covered bridge 15 ft (4.6 m) downstream.

DRAINAGE AREA.--211 mi^2 (546 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for October, November 1950, published in WSP 1722.

REVISED RECORDS.--WSP 1382: 1951-53, 1954(M). WDR PA-67: 1965(M). WDR PA-72: 1971(M).

GAGE.--Water-stage recorder. Datum of gage is 216.60 ft (66.020 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Blue Marsh Reservoir (station 01470870) 3.9 mi (6.3 km) upstream. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--30 years, 314 ft^3/s (8.892 m^3/s), 20.19 in/yr (513 mm/yr), adjusted for storage since April 1979.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,000 ft^3/s (481 m^3/s) June 23, 1972, gage height, 15.65 ft (4.770 m), from floodmark in gage shelter, from rating curve extended above 3,500 ft^3/s (99 m^3/s) on basis of contracted-opening measurement of peak flow; minimum, 23 ft^3/s (0.65 m^3/s) Dec. 1, 1964, gage height, 0.94 ft (0.287 m), result of upstream shutoff.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,090 ft^3/s (59.2 m^3/s) Oct. 24, gage height, 4.13 ft (1.259 m); minimum, 62 ft^3/s (1.76 m^3/s) Sept. 10, 11, gage height, 1.16 ft (0.354 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	559	167	272	412	158	148	868	666	286	143	105	91
2	866	170	271	412	153	144	733	646	277	143	103	82
3	1160	185	308	324	159	114	595	602	256	139	103	70
4	1240	177	374	249	154	115	583	531	237	136	101	70
5	1330	176	354	241	155	119	562	399	214	139	106	70
6	1300	191	266	232	153	115	493	293	185	143	134	72
7	1270	241	269	220	153	117	369	310	168	136	106	72
8	1240	272	265	207	153	136	342	332	182	136	103	70
9	907	296	264	203	151	143	418	343	185	136	103	70
10	467	343	227	199	154	191	438	336	200	136	96	68
11	450	343	198	211	149	281	429	337	258	139	94	68
12	453	343	198	236	118	284	428	379	303	136	94	67
13	449	341	212	215	105	216	427	483	277	126	93	68
14	439	288	254	312	81	246	428	485	258	110	89	70
15	434	223	265	345	82	277	434	361	209	110	89	74
16	371	209	267	266	86	285	455	305	171	117	92	143
17	197	211	249	216	83	357	478	304	165	109	94	215
18	195	211	220	241	79	488	437	302	162	91	94	230
19	193	209	207	241	184	885	405	302	163	89	94	117
20	192	206	207	241	248	894	401	277	164	88	92	72
21	193	204	203	236	173	756	356	336	163	85	94	73
22	270	204	203	215	161	1280	303	354	161	88	92	72
23	809	204	203	203	166	1250	300	344	162	136	94	72
24	1020	203	207	199	159	626	298	339	153	270	94	90
25	396	204	260	196	188	605	217	302	139	258	92	160
26	531	261	368	195	219	690	111	247	139	151	92	214
27	528	292	434	192	199	682	139	167	136	124	92	212
28	548	286	428	193	158	602	237	293	136	106	92	212
29	647	523	423	175	145	448	318	294	143	108	92	160
30	531	532	418	106	---	436	539	283	154	104	91	70
31	166	---	418	175	---	666	---	273	---	103	93	---
TOTAL	19351	7715	8712	7308	4326	13596	12541	11225	5806	4035	3003	3194
MEAN	624	257	281	236	149	439	418	362	194	130	96.9	106
MAX	1330	532	434	412	248	1280	868	666	303	270	134	230
MIN	166	167	198	106	79	114	111	167	136	85	89	67
MEAN≠	529	277	282	229	149	448	502	355	196	123	79.1	69
CFSM≠	2.51	1.31	1.34	1.08	.70	2.12	2.38	1.68	.93	.58	.38	.33
IN.≠	2.89	1.47	1.54	1.25	.76	2.45	2.66	1.94	1.04	.67	.43	.36

CAL YR 1979 TOTAL 153127 MEAN 420 MAX 2740 MIN 86 MEAN≠ 444 CFSM≠ 2.11 IN.≠ 28.60
WTR YR 1980 TOTAL 100812 MEAN 275 MAX 1330 MIN 67 MEAN≠ 271 CFSM≠ 1.28 IN.≠ 17.46

≠ Adjusted for change in contents in Blue Marsh Reservoir.

01471000 TULPEHOCKEN CREEK NEAR READING, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1975 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM SUSPENDED RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAR 21...	1500	1070	306	7.8	9.0	0	0	0	9	8	1	73
APR 04...	1605	582	254	7.5	12.2	0	0	0	3	--	--	12
28...	1105	236	281	7.8	14.5	0	0	0	6	8	0	10

DATE	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
MAR 21...	67	6	20	20	0	7	7	0	40	20	20
APR 04...	2	10	6	5	1	3	0	3	10	0	10
28...	6	4	4	4	0	2	2	0	10	0	10

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	.LEAD, TOTAL RECOVERABLE (UG/L AS PB)
OCT 01...	1526	798	160	7.3	17.0	0	13	7	32	39
MAR 21...	1500	1070	306	7.8	9.0	0	9	--	73	20
APR 04...	1605	582	254	7.5	12.2	0	3	--	12	6
28...	1105	236	281	7.8	14.5	0	6	--	10	4

DATE	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PCB TOTAL (UG/L)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
OCT 01...	12	90	.00	.0	.00	.0	.00	.00	.00
MAR 21...	7	40	--	--	--	--	--	--	--
APR 04...	3	10	--	--	--	--	--	--	--
28...	2	10	--	--	--	--	--	--	--

DATE	DIELDRIN TOTAL (UG/L)	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METHOXYCHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)
OCT 01...	.00	.00	.00	.00	.00	.00	.00	.00	0
MAR 21...	--	--	--	--	--	--	--	--	--
APR 04...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--

01471000 TULPEHOCKEN CREEK NEAR READING, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ANTIMONY, TOTAL IN BOTTOM MATERIAL (UG/G)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)
DEC 05...	0900	0	0	6	<10	20	30	60	.00	30

DATE	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	SILVER, RECOV. FM BOTTOM MATERIAL (UG/G AS AG)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)
DEC 05...	0	<1	110	26	6.1	32	11	.0	5	1.0

DATE	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
DEC 05...	1.2	.6	1.4	.0	.0	.0	.0	.0	0

01471510 SCHUYLKILL RIVER AT READING, PA

LOCATION.--Lat 40°19'52", long 75°56'22", Berks County, Hydrologic Unit 02040203, on Penn Avenue Bridge at West Reading, 0.8 mi (1.3 km) downstream from Tulpehocken Creek.

DRAINAGE AREA.--880 mi^2 (2,280 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1914 to Sept. 1915, Oct. 1919 to Sept. 1930 and June 30, 1977 to current year. Monthly discharge only prior to current year published in WSP 1302. Diversion by Schuylkill Navigation Canal included during the navigation seasons of 1914-15.

REVISED RECORDS.--WDR PA-78-1: 1977.

GAGE.--Nonrecording gage. Datum of gage is 185.50 ft (56.540 m) Pennsylvania Railroad Datum. May 7, 1914 to Sept. 30, 1930, nonrecording gage. June 30, 1977 to July 5, 1979, water stage recorder at site 1,500 ft (457 m) downstream at same datum.

REMARKS.--Record fair. Several observatons of water temperature were made during the year.

AVERAGE DISCHARGE.--15 years (Water years 1915, 1920-30, 1978-80), 1,580 ft^3/s (44.75 m^3/s), 24.36 in/yr (619 mm/yr), 1914-15 adjusted for diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,500 ft^3/s (1,060 m^3/s) Jan. 25, 1979, gage height, 17.36 ft (5.291 m) at site 1,500 ft (457 m) downstream, from rating curve extended above 16,000 ft^3/s (453 m^3/s); minimum observed, 82 ft^3/s (2.32 m^3/s) Aug. 12, 1930, gage height, -1.19 ft (-0.363 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 23, 1972, reached a stage of about 31.3 ft (9.54 m) at site 1,500 ft (457 m) downstream, present datum, from floodmarks, discharge, about 90,000 ft^3/s (2,550 m^3/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,800 ft^3/s (164 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 1	2200	*10,800	306	*8.30	2.530	Mar. 22	1100	8,800	249	7.50	2.286
Mar. 18	0800	7,050	200	6.77	2.063						

Minimum daily discharge, 242 ft^3/s (6.85 m^3/s) Sept. 8, 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7440	1100	2510	1990	714	564	4660	4420	1210	679	439	320
2	8560	1200	2290	1780	696	500	4460	3780	1450	654	432	296
3	7480	3000	1940	1650	679	446	4040	3490	1520	662	425	278
4	7030	2500	1670	1400	679	484	4000	3050	1180	654	460	272
5	6550	2200	1660	1370	688	540	3500	2510	1030	671	425	284
6	6530	2000	1610	1270	671	532	3000	2230	900	814	418	266
7	5950	1900	1490	1210	645	556	2390	2150	900	572	404	260
8	5100	1700	1320	1140	654	628	2320	1990	1140	532	397	242
9	4400	1570	1160	1080	705	759	3330	1840	940	508	404	242
10	3800	1810	1090	1060	671	852	4950	1690	980	508	404	266
11	3320	1730	1070	1320	572	990	4280	1620	1000	476	418	272
12	3140	1720	1030	2350	572	804	3730	2050	960	476	432	266
13	3050	1650	1230	1510	508	842	3240	3870	900	460	404	272
14	2660	1610	1520	1430	508	890	3540	3660	861	432	376	278
15	2480	1470	1250	1520	540	970	3840	2860	814	425	369	278
16	2110	1340	1140	1380	588	1140	3980	2350	741	460	376	284
17	1810	1310	1170	1300	508	1560	3540	2090	688	580	369	404
18	1670	1290	1030	1280	500	5340	3080	2210	662	564	348	532
19	1520	1240	1050	1300	604	5140	2750	2030	654	460	341	404
20	1450	1170	1020	1150	759	4400	2500	1760	688	432	327	308
21	1440	1130	960	1100	620	5000	2260	1870	671	404	327	290
22	1480	1090	1030	1050	777	8160	1990	1960	645	404	327	278
23	2080	1070	1060	1000	960	7600	1840	1690	612	446	334	278
24	2030	1070	2480	960	1080	5100	1730	1530	580	588	334	284
25	1970	1100	4600	960	940	4860	1620	1420	572	596	334	404
26	1790	1340	4560	970	861	4360	1560	1220	572	484	327	432
27	1750	3170	3900	1010	750	3840	1810	1130	556	432	320	348
28	1800	3210	3170	900	679	3440	3690	1170	588	411	308	302
29	2000	3120	2750	823	628	3720	4130	1170	620	411	302	290
30	1500	2590	2500	654	---	3610	4030	1170	628	425	314	278
31	1200	---	2230	732	---	3940	---	1170	---	432	314	---
TOTAL	105090	52400	57490	38649	19756	81567	95790	67150	25262	16052	11509	9208
MEAN	3390	1747	1855	1247	681	2631	3193	2166	842	518	371	307
MAX	8560	3210	4600	2350	1080	8160	4950	4420	1520	814	460	532
MIN	1200	1070	960	654	500	446	1560	1130	556	404	302	242
CFSM	3.85	1.99	2.11	1.42	.77	2.99	3.63	2.46	.96	.59	.42	.35
IN.	4.44	2.22	2.43	1.63	.84	3.45	4.05	2.84	1.07	.68	.49	.39

CAL YR 1979 TOTAL 825989 MEAN 2263 MAX 24700 MIN 400 CFSM 2.57 IN 34.92
WTR YR 1980 TOTAL 579923 MEAN 1584 MAX 8560 MIN 242 CFSM 1.80 IN 24.51

01471510 SCHUYLKILL RIVER AT READING, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1979 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
DEC								
27...	1130	3900	396	7.4	5.0	0	0	0
MAR								
21...	1900	8850	230	7.4	--	0	0	0
APR								
04...	1745	4100	204	7.4	12.0	0	0	0
MAY								
13...	1330	4700	304	7.8	16.0	0	0	0
20...	1720	1700	301	7.6	19.4	0	0	0
27...	0140	1080	330	7.6	18.3	0	0	0
JUN								
26...	1015	468	301	7.8	22.0	0	0	0

DATE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)
DEC									
27...	20	10	10	3	0	3	4	4	0
MAR									
21...	2	1	1	41	31	10	25	25	0
APR									
04...	5	3	2	7	0	7	7	5	2
MAY									
13...	6	5	1	11	5	6	11	11	0
20...	6	5	1	9	5	4	8	8	0
27...	9	8	1	6	0	6	3	2	1
JUN									
26...	7	7	0	6	2	4	7	7	0

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
DEC								
27...	6	0	6	30	20	10	--	--
MAR								
21...	13	8	5	70	40	30	--	--
APR								
04...	10	4	6	30	20	10	--	--
MAY								
13...	17	4	13	40	30	10	--	--
20...	5	5	0	20	10	10	--	--
27...	10	4	6	30	20	10	--	8.9
JUN								
26...	6	0	6	10	0	10	3.0	3.3

01471510 SCHUYLKILL RIVER AT READING, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	PCB TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)
DEC 27...	1130	.10	.0	.00	.0	.00	.00	.00	.00
MAR 21...	1900	.20	.0	.00	.0	.00	.00	.03	.00
APR 04...	1745	.10	.0	.00	.0	.00	.00	.00	.00
MAY 13...	1330	.20	.0	.00	.0	.00	.00	.00	.00

DATE	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)
DEC 27...	.00	.00	.00	.00	.00	.00	.00	.00	0
MAR 21...	.00	.00	.00	.00	.00	.00	.00	.00	0
APR 04...	.00	.00	.00	.00	.00	.00	.00	.00	0
MAY 13...	.00	.00	.00	.00	.00	.00	.00	.00	0

DATE	TIME	ANTI-MONY, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BERYL-LIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)
DEC 05...	1630	1	0	6	<10	70	160	640	.00	170

DATE	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	SILVER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS AG)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
DEC 05...	1	<1	770	60	4.2	64	170	.0	16	.0

DATE	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
DEC 05...	10	9.3	.7	.0	.0	.0	.0	.0	0

01471980 MANATAWNY CREEK NEAR POTTSTOWN, PA

LOCATION.--Lat 40°16'22", long 75°40'49", Berks County, Hydrologic Unit 02040203, on left bank about 180 ft (55 m) upstream from bridge on Manatawny Street, 0.7 mi (1.1 km) downstream from Ironstone Creek, 2.4 mi (3.9 km) northwest of Pottstown, 3.1 mi (5.0 km) upstream from mouth, and 4.7 mi (7.6 km) southwest of Boyertown.

DRAINAGE AREA.--85.5 mi^2 (221.4 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 150.00 ft (45.720 m) National Geodetic Vertical Datum of 1929 (level by Corps of Engineers).

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperature were made during this year.

AVERAGE DISCHARGE.--6 years, 149 ft^3/s (4.220 m^3/s), 23.72 in/yr (602 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,390 ft^3/s (153 m^3/s) Jan. 24, 1979, gage height, 11.19 ft (3.411 m); minimum, 14 ft^3/s (0.40 m^3/s) Aug. 28, 29, 1980, gage height, 1.72 ft (0.524 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 22, 1972, reached a stage of 17.1 ft (5.21 m), from floodmarks, discharge, about 9,600 ft^3/s (272 m^3/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,150 ft^3/s (60.9 m^3/s) March 21, gage height, 6.09 ft (1.856 m); minimum, 14 ft^3/s (0.40 m^3/s) Aug. 28, 29, gage height, 1.72 ft (0.524 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	387	91	98	106	70	50	448	412	152	52	46	28
2	230	96	96	101	65	50	287	257	116	49	43	26
3	253	275	89	98	60	50	230	226	108	46	34	25
4	176	176	89	91	65	55	436	202	118	49	32	26
5	218	123	89	91	60	62	262	187	83	46	30	24
6	244	111	89	90	60	62	214	173	74	66	40	29
7	142	106	129	90	60	59	198	173	80	46	32	26
8	129	101	98	87	65	73	187	180	83	43	28	22
9	136	98	87	83	70	176	306	152	83	44	26	22
10	424	136	83	80	65	89	387	136	118	39	26	21
11	271	152	83	100	60	116	226	139	87	39	28	20
12	214	190	80	281	57	80	198	176	73	38	34	21
13	214	136	129	126	55	74	194	312	68	34	30	21
14	155	139	155	108	52	139	210	176	66	32	26	19
15	139	118	101	108	60	129	362	136	62	31	28	47
16	129	111	96	98	89	149	214	118	76	43	29	34
17	116	106	111	91	73	287	180	111	66	136	26	29
18	111	98	95	106	56	641	166	129	61	62	24	111
19	106	96	90	166	66	248	152	126	59	44	26	36
20	101	91	90	116	74	194	142	118	62	40	26	27
21	98	89	90	98	73	982	139	202	59	38	23	25
22	98	89	91	96	91	581	126	155	55	43	21	24
23	106	89	98	90	126	306	123	111	52	69	22	23
24	202	87	126	85	106	257	118	101	50	52	21	20
25	123	83	520	80	83	460	116	98	50	44	19	23
26	108	266	222	80	73	248	111	87	49	39	19	30
27	98	248	166	80	62	214	187	83	46	36	17	26
28	116	139	139	76	55	198	691	80	44	34	16	22
29	126	118	126	74	50	343	674	76	55	36	16	22
30	101	106	118	70	---	248	356	89	91	38	17	23
31	96	---	111	70	---	318	---	91	---	34	23	---
TOTAL	5167	3864	3784	3116	2001	6938	7640	4812	2246	1442	828	852
MEAN	167	129	122	101	69.0	224	255	155	74.9	46.5	26.7	28.4
MAX	424	275	520	281	126	982	691	412	152	136	46	111
MIN	96	83	80	70	50	50	111	76	44	31	16	19
CFSM	1.95	1.51	1.43	1.18	.81	2.62	2.98	1.81	.88	.54	.31	.33
IN.	2.25	1.68	1.65	1.36	.87	3.02	3.32	2.09	.98	.63	.36	.37

CAL YR 1979 TOTAL 67530 MEAN 185 MAX 2210 MIN 43 CFSM 2.16 IN 29.38
WTR YR 1980 TOTAL 42690 MEAN 117 MAX 982 MIN 16 CFSM 1.37 IN 18.57

01471980 MANATAWNY CREEK NEAR POTTSTOWN, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1979 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM SUSPENDED RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAR												
21...	1207	658	175	7.2	9.5	1	1	0	47	29	18	43
21...	1537	1740	164	7.1	11.0	0	0	0	27	26	1	38
25...	1535	375	179	7.4	6.5	0	0	0	1	0	1	8
APR												
09...	0510	183	230	7.9	13.0	0	0	0	3	2	1	4
29...	1050	850	136	7.6	11.0	0	0	0	6	5	1	10
MAY												
27...	0320	78	258	8.0	18.9	0	0	0	10	9	1	3
JUN												
25...	1820	50	274	8.5	26.0	0	0	0	13	12	0	5

DATE	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
MAR											
21...	35	8	46	45	1	21	19	2	110	90	20
21...	27	11	48	48	0	19	19	0	190	180	10
25...	5	3	7	6	1	1	1	0	10	0	10
APR											
09...	2	2	2	2	0	0	0	0	10	0	10
29...	5	5	17	17	0	4	4	0	30	20	10
MAY											
27...	1	2	2	2	0	1	1	0	10	10	0
JUN											
25...	2	3	2	2	0	0	0	0	10	0	10

01472000 SCHUYLKILL RIVER AT POTTSTOWN, PA

LOCATION.--Lat 40°14'30", long 75°39'07", Montgomery County, Hydrologic Unit 02040203, on right bank 75 ft upstream from Hanover Street bridge in Pottstown and 0.4 mi (0.6 km) downstream from Manatawny Creek.

DRAINAGE AREA.--1,147 mi^2 (2,971 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1926 to current year. Monthly discharges only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 117.86 ft (35.924 m) National Geodetic Vertical Datum of 1929. October 1926 to Nov. 22, 1928, nonrecording gage and Nov. 23, 1928, to Dec. 26, 1972, recording gage, at site 100 ft (30 m) downstream at same datum. Dec. 27, 1972, to May 10, 1974, nonrecording gage 1.0 mi (1.6 km) downstream at datum 2.83 ft (0.863 m) lower.

REMARKS.--Records good. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--54 years, 1,907 ft^3/s (54.01 m^3/s), 22.58 in/yr (574 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 95,900 ft^3/s (2,720 m^3/s) June 23, 1972, gage height, 29.97 ft (9.135 m), from floodmark; minimum, 87 ft^3/s (2.46 m^3/s) Aug. 13, 1930, gage height, 0.43 ft (0.131 m); minimum daily, 175 ft^3/s (4.96 m^3/s) Sept. 19, 1932.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known prior to October 1926, 21.0 ft (6.40 m) Feb. 28, 1902, from floodmarks, discharge, 53,900 ft^3/s (1,530 m^3/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 7,200 ft^3/s (204 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 2	0630	9,840	279	7.50	2.286	Mar. 22	0900	*13,600	385	*9.05	2.758
Mar. 18	1930	7,700	218	6.46	1.969						

Minimum discharge, 350 ft^3/s (9.91 m^3/s) Sept. 10, gage height, 1.25 ft (0.381 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3600	1290	2320	2010	895	688	5270	5430	1570	788	536	458
2	8380	1260	2110	1870	860	668	4760	4230	1500	658	536	436
3	6050	2510	1920	1760	820	663	4270	3970	1450	630	496	467
4	6470	2670	1880	1560	850	661	4610	3370	1460	623	575	410
5	5650	2340	1890	1480	840	713	3930	2880	1290	623	516	395
6	6530	2130	1710	1400	800	701	3250	2460	1120	733	646	432
7	5360	2020	1810	1320	800	683	2780	2350	1070	717	491	398
8	4730	1940	1590	1280	850	703	2480	2280	1180	616	475	382
9	4130	1810	1440	1230	837	1190	3120	2060	1190	603	476	376
10	4270	1970	1360	1160	797	954	5630	1910	1290	589	470	365
11	3630	2120	1270	1310	761	1080	4480	1840	1260	569	493	387
12	3160	2170	1220	2250	740	1040	3810	1950	1170	569	570	417
13	3150	1940	1410	1770	707	919	3480	4150	1090	542	531	382
14	2710	1930	1880	1510	669	1160	3320	3810	1010	510	489	376
15	2460	1730	1580	1670	688	1240	4540	3030	983	503	472	504
16	2290	1630	1410	1560	734	1340	4070	2490	983	523	496	449
17	1960	1590	1470	1420	715	1750	3640	2210	876	949	470	520
18	1810	1520	1290	1390	658	5790	3230	2150	820	717	456	1130
19	1710	1460	1230	1610	633	6050	2860	2080	796	575	458	573
20	1610	1400	1240	1410	846	4790	2620	1950	812	516	459	458
21	1530	1360	1200	1320	832	6190	2390	2250	804	496	449	407
22	1460	1330	1230	1290	901	12100	2120	2450	772	510	435	406
23	1810	1280	1260	1260	1160	8230	1990	1950	725	665	452	387
24	2770	1250	1350	1170	1200	5420	1880	1760	701	741	455	371
25	2200	1250	3520	1130	1100	5560	1800	1670	679	756	446	398
26	1870	1750	4910	1110	1010	4650	1550	1480	658	623	444	525
27	1760	3830	3890	1060	909	3960	1680	1300	644	562	431	516
28	1810	3360	3150	1050	814	3490	4080	1320	637	510	431	496
29	2170	3010	2720	1030	767	3700	5720	1320	686	496	423	482
30	1860	2940	2420	892	---	3900	5540	1350	983	523	431	415
31	1380	---	2200	924	---	3910	---	1330	---	516	453	---
TOTAL	100280	58790	59880	43206	24193	93893	104900	74780	30209	18951	14961	13718
MEAN	3235	1960	1932	1394	834	3029	3497	2412	1007	611	483	457
MAX	8380	3830	4910	2250	1200	12100	5720	5430	1570	949	646	1130
MIN	1380	1250	1200	892	633	661	1550	1300	637	496	423	365
CFSM	2.82	1.71	1.68	1.22	.73	2.64	3.05	2.10	.88	.53	.42	.40
IN.	3.25	1.91	1.94	1.40	.78	3.05	3.40	2.43	.98	.61	.49	.44

CAL YR 1979 TOTAL 1015145 MEAN 2781 MAX 37800 MIN 569 CFSM 2.43 IN 32.92
WTR YR 1980 TOTAL 637761 MEAN 1743 MAX 12100 MIN 365 CFSM 1.52 IN 20.68

01472000 SCHUYLKILL RIVER AT POTTSTOWN, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1975 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	SODIUM+ POTAS-SIUM DIS-SOLVED (MG/L AS NA)
FEB												
20...	1050	852	495	6.6	180	110	44	16	27	25	.9	30

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
FEB											
20...	2.7	64	110	33	.3	6.9	302	291	.41	695	2.9

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
DEC								
27...	1300	3830	410	7.5	5.5	0	0	0
MAR								
21...	2115	10200	179	7.4	7.0	0	0	0
25...	1500	5560	205	7.4	7.0	0	0	0
29...	0500	3180	255	7.2	8.0	--	--	--
29...	1220	3800	248	7.4	8.0	0	0	0
30...	0445	4130	233	7.2	8.0	--	--	--
30...	1120	3890	235	7.1	9.0	0	0	0
MAY								
12...	1930	2060	302	7.2	16.6	--	--	--
13...	0620	4030	245	7.6	16.0	--	--	--
13...	1205	4570	273	7.7	17.0	0	0	0
13...	1840	4750	287	7.7	17.8	--	--	--
14...	0020	4400	295	7.5	16.5	--	--	--
14...	0710	3940	289	7.1	16.5	--	--	--
14...	2020	3540	271	7.7	17.8	--	--	--
21...	0925	2070	308	7.4	17.8	0	0	0
JUN								
25...	1725	672	468	8.4	26.5	0	0	0

SCHUYLKILL RIVER BASIN

01472000 SCHUYLKILL RIVER AT POTTSTOWN, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)
DEC									
27...	20	10	10	7	2	5	5	5	0
MAR									
21...	21	19	2	72	67	5	62	62	0
25...	7	5	2	9	5	4	10	10	0
29...	--	--	--	61	57	4	55	54	1
29...	7	5	2	14	10	4	5	3	2
30...	--	--	--	53	49	4	28	28	0
30...	10	8	2	11	8	3	10	10	0
MAY									
12...	--	--	--	13	5	8	5	4	1
13...	--	--	--	300	290	10	200	200	0
13...	10	9	1	28	22	6	30	29	1
13...	--	--	--	16	11	5	18	16	2
14...	--	--	--	26	18	8	21	17	4
14...	--	--	--	26	21	5	26	26	0
14...	--	--	--	10	6	4	7	7	0
21...	11	10	1	11	8	3	6	6	0
JUN									
25...	9	5	4	7	1	6	5	5	0

DATE	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
DEC								
27...	6	0	6	160	100	60	--	--
MAR								
21...	20	18	2	110	100	10	26	3.8
25...	8	1	7	30	20	10	--	5.0
29...	--	--	--	--	--	--	4.7	--
29...	7	0	8	40	30	10	2.7	1.7
30...	--	--	--	--	--	--	11	--
30...	12	4	8	50	40	10	2.7	2.4
MAY								
12...	--	--	--	--	--	--	--	5.0
13...	--	--	--	--	--	--	18	5.1
13...	13	10	3	70	50	20	7.1	2.7
13...	--	--	--	--	--	--	3.7	2.7
14...	--	--	--	--	--	--	5.7	3.2
14...	--	--	--	--	--	--	2.3	2.3
14...	--	--	--	--	--	--	5.7	3.6
21...	8	7	1	30	20	10	--	5.0
JUN								
25...	4	1	3	20	10	10	4.1	3.3

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	PCB TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)
DEC									
27...	1300	.10	.0	.00	.0	.00	.00	.00	.00
MAR									
21...	2115	.20	.0	.00	.0	.00	.00	.00	.00
25...	1500	.10	.0	.00	.0	.00	.00	.00	.00
29...	1220	.20	.0	.00	.0	.00	.00	.00	.00
30...	1120	.00	.0	.00	.0	.00	.00	.00	.00
MAY									
13...	1205	.20	.0	.00	.0	.00	.00	.00	.00
14...	0710	.20	.0	.00	.0	.00	.00	.00	.00

DATE	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PER- THANE TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)
DEC									
27...	.00	.00	.00	.00	.00	.00	.00	.00	0
MAR									
21...	.00	.00	.00	.00	.00	.00	.00	.00	0
25...	.00	.00	.00	.00	.00	.00	.00	.00	0
29...	.00	.00	.00	.00	.00	.00	.00	.00	0
30...	.00	.00	.00	.00	.00	.00	.00	.00	0
MAY									
13...	.00	.00	.00	.00	.00	.00	.00	--	0
14...	.00	.00	.00	.00	.00	.00	.00	.00	0

DATE	TIME	ANTI- MONY, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	BERYL- LIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI)
NOV										
15...	0930	0	2	7	<10	80	180	260	.00	110

DATE	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	SILVER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS AG)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
NOV										
15...	1	1	480	49	.9	50	260	.0	46	7.7

DATE	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	METH- OXY- CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
NOV									
15...	9.2	6.2	2.1	.0	.0	.0	.0	.0	0

01472157 FRENCH CREEK NEAR PHOENIXVILLE, PA

LOCATION.--Lat 40°09'05", long 75°36'06", Chester County, Hydrologic Unit 02040203, on right bank 70 ft (21 m) downstream from two-span county bridge on French Creek Road, 4.5 mi (7.2 km) northwest of Phoenixville, and 7.3 mi (11.7 km) upstream from mouth.

DRAINAGE AREA.--59.1 mi^2 (153.1 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 160 ft (49 m), from topographic map. Prior to Nov. 7, 1968, nonrecording gage at site 70 ft (21 m) upstream at same datum.

REMARKS.--Records fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--12 years, 96.6 ft^3/s (2.736 m^3/s), 22.20 in/yr (564 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,200 ft^3/s (317 m^3/s) June 22, 1972, gage height, 13.66 ft (4.164 m), from rating curve extended above 2,500 ft^3/s (70.8 m^3/s) on basis of slope-area measurement of peak flow; minimum, 10 ft^3/s (0.28 m^3/s) Sept. 12, 13, 14, 1980, gage height, 4.05 ft (1.234 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,440 ft^3/s (40.8 m^3/s) March 21, gage height, 7.65 ft (2.332 m); minimum, 10 ft^3/s (0.28 m^3/s) Sept. 12, 13, 14, gage height, 4.05 ft (1.234 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	201	64	86	66	55	45	401	326	74	46	31	15
2	137	64	85	65	50	45	247	198	66	41	29	15
3	150	286	80	65	50	45	198	170	65	39	30	14
4	97	137	78	61	55	50	281	147	61	39	26	13
5	119	96	78	62	50	52	201	132	56	39	25	13
6	174	86	80	62	50	56	162	123	52	47	25	15
7	92	82	102	62	50	52	147	119	56	39	25	14
8	83	77	82	60	55	60	137	152	75	35	22	14
9	85	75	74	58	60	106	243	125	64	35	21	13
10	463	121	72	55	55	72	296	112	71	35	20	12
11	256	119	72	142	50	94	176	106	60	34	20	11
12	176	173	71	278	50	64	152	125	53	34	32	11
13	167	112	104	102	45	58	144	345	50	33	27	10
14	121	110	116	88	45	114	144	154	47	31	22	10
15	108	94	78	90	53	112	206	114	46	28	22	12
16	100	88	74	78	62	123	149	100	57	31	25	12
17	96	83	77	72	50	234	128	90	48	48	23	12
18	92	80	72	78	45	444	121	112	46	44	21	14
19	87	77	70	143	50	176	114	110	46	35	20	15
20	83	75	65	85	55	137	110	112	46	32	20	15
21	82	74	65	73	49	682	106	168	45	30	19	14
22	81	72	68	71	72	440	100	128	43	32	19	14
23	80	72	78	76	107	201	96	96	41	44	17	13
24	166	71	94	64	82	170	94	85	41	38	17	11
25	100	71	222	63	71	285	92	83	40	32	17	11
26	85	278	135	61	64	173	90	74	39	29	17	34
27	79	192	92	61	55	144	135	68	39	27	16	20
28	90	121	82	58	50	130	440	65	37	27	15	16
29	99	104	75	58	45	257	373	64	51	27	15	15
30	69	92	72	55	---	187	218	62	74	27	15	15
31	66	---	69	55	---	423	---	65	---	26	15	---
TOTAL	3884	3246	2668	2467	1630	5231	5501	3930	1589	1084	668	423
MEAN	125	108	86.1	79.6	56.2	169	183	127	53.0	35.0	21.5	14.1
MAX	463	286	222	278	107	682	440	345	75	48	32	34
MIN	66	64	65	55	45	45	90	62	37	26	15	10
CFSM	2.12	1.83	1.46	1.35	.95	2.86	3.10	2.15	.90	.59	.36	.24
IN.	2.44	2.04	1.68	1.55	1.03	3.29	3.46	2.47	1.00	.68	.42	.27

CAL YR 1979 TOTAL 50101 MEAN 137 MAX 2370 MIN 24 CFSM 2.32 IN 31.54
WTR YR 1980 TOTAL 32321 MEAN 88.3 MAX 682 MIN 10 CFSM 1.49 IN 20.34

01472157 FRENCH CREEK NEAR PHOENIXVILLE, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1969 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
NOV										
09...	1030	75	102	6.6	9.0	11.4	31	13	8.1	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS NH4)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)
NOV										
09...	16	1.6	1.6	.000	.00	.22	.22	1.8	8.1	.170

DATE	PHOS-PHORUS, TOTAL (MG/L AS PO4)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
NOV									
09...	.52	0	0	20	0	0	.1	0	10

01472174 PICKERING CREEK NEAR CHESTER SPRINGS, PA

LOCATION.--Lat 40°05'22", long 75°37'50", Chester County, Hydrologic Unit 02040203, on left bank 30 ft (9.1 m) downstream from bridge on Horseshoe Trail Road, 0.45 mi (0.72 km) downstream from unnamed tributary, and 0.75 mi (1.21 km) southwest of Chester Springs.

DRAINAGE AREA.--5.98 mi^2 (15.49 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1967 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 280 ft (85 m), from topographic map. Prior to Aug. 11, 1967, nonrecording gage at same site and datum.

REMARKS.--Records fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--13 years, 10.8 ft^3/s (0.306 m^3/s), 24.55 in/yr (624 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,410 ft^3/s (68.3 m^3/s) June 22, 1972, gage height, 5.21 ft (1.588 m), from rating curve extended above 700 ft^3/s (19.8 m^3/s); minimum, 0.87 ft^3/s (0.025 m^3/s) Sept. 1, 2, 1969, gage height, 0.94 ft (0.287 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 280 ft^3/s (7.93 m^3/s) March 21, gage height, 4.38 ft (91.335 m); minimum, 2.1 ft^3/s (0.059 m^3/s) Sept. 23, 24, 25, gage height, 1.89 ft (0.576 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	9.5	11	8.7	6.9	6.3	58	40	8.5	5.8	3.5	2.5
2	7.8	9.5	11	8.5	6.6	6.3	29	15	8.0	5.5	3.1	2.4
3	8.5	57	10	8.5	6.8	6.3	22	12	7.8	5.5	3.5	2.4
4	6.5	16	11	8.1	6.6	6.8	31	10	7.8	5.4	3.1	2.4
5	11	14	10	8.5	6.6	7.3	21	9.5	7.4	5.6	3.1	2.4
6	8.7	13	11	8.3	6.9	6.9	16	9.1	7.4	5.9	3.1	2.4
7	7.4	13	12	8.3	6.6	6.8	14	9.1	7.4	5.1	3.0	2.4
8	7.1	12	9.9	8.3	6.6	9.1	13	12	7.8	5.0	2.9	2.3
9	8.5	12	9.7	8.1	6.6	8.5	26	9.1	7.4	4.9	2.8	2.3
10	78	19	9.7	8.0	6.5	7.4	23	8.7	7.8	4.7	2.8	2.3
11	16	18	9.7	27	6.9	8.5	16	8.9	7.4	4.7	3.0	2.2
12	15	22	9.7	26	6.2	7.1	13	12	7.1	4.8	3.0	2.2
13	12	15	13	10	6.5	8.1	12	26	6.9	4.3	2.8	2.2
14	9.3	14	10	9.9	6.6	21	13	9.5	6.9	4.1	2.7	2.2
15	8.7	13	9.7	9.7	6.2	12	19	8.7	7.1	3.9	2.8	2.5
16	8.5	12	9.7	9.3	7.6	14	12	8.5	7.8	5.3	2.7	2.3
17	8.3	11	9.7	8.9	6.9	22	11	8.1	6.9	4.9	2.7	2.3
18	8.1	11	9.1	9.5	6.6	22	9.9	9.5	6.6	4.1	2.7	2.4
19	7.8	9.9	9.1	14	7.1	11	9.7	17	6.6	4.0	2.7	2.2
20	7.8	9.9	9.3	9.3	6.9	9.9	9.5	12	6.6	3.8	2.7	2.2
21	7.8	9.7	9.3	8.7	7.1	88	9.3	17	6.3	3.7	2.6	2.2
22	8.0	9.7	9.3	8.5	8.3	26	9.1	9.9	6.3	4.9	2.5	2.2
23	8.3	9.5	9.9	8.7	8.3	19	8.9	8.9	6.2	4.8	2.5	2.2
24	21	9.5	9.7	8.1	8.1	16	8.7	8.7	6.0	4.0	2.4	2.1
25	11	9.5	19	7.6	7.6	27	8.7	8.3	5.9	3.6	2.4	2.4
26	11	73	10	7.4	7.1	17	8.5	8.0	5.9	3.5	2.4	2.9
27	9.9	20	9.5	7.4	6.8	15	14	7.8	5.8	3.4	2.4	2.2
28	11	15	9.3	7.6	6.8	12	38	7.8	5.6	3.3	2.4	2.2
29	10	13	9.1	7.4	6.8	26	38	7.6	6.2	3.3	2.4	2.2
30	9.5	11	9.1	7.4	---	18	25	7.6	7.1	3.2	2.4	2.2
31	9.3	---	8.9	7.3	---	104	---	8.5	---	3.2	2.7	---
TOTAL	390.8	490.7	317.4	303.0	201.1	575.3	546.3	354.8	208.5	138.2	85.8	69.3
MEAN	12.6	16.4	10.2	9.77	6.93	18.6	18.2	11.4	6.95	4.46	2.77	2.31
MAX	78	73	19	27	8.3	104	58	40	8.5	5.9	3.5	2.9
MIN	6.5	9.5	8.9	7.3	6.2	6.3	8.5	7.6	5.6	3.2	2.4	2.1
CFSM	2.11	2.74	1.71	1.63	1.16	3.11	3.04	1.91	1.16	.75	.46	.39
IN.	2.43	3.05	1.97	1.88	1.25	3.58	3.40	2.21	1.30	.86	.53	.43

CAL YR 1979 TOTAL 5660.6 MEAN 15.5 MAX 420 MIN 3.0 CFSM 2.59 IN 35.21
WTR YR 1980 TOTAL 3681.2 MEAN 10.1 MAX 104 MIN 2.1 CFSM 1.69 IN 22.90

01472174 PICKERING CREEK NEAR CHESTER SPRINGS, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1970 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
NOV 01...	1530	9.3	210	7.3	12.0	9.8	32	14	12	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS NH4)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)
NOV 01...	17	2.5	2.7	.090	.11	.44	.53	3.0	13	.010

DATE	PHOS-PHORUS, TOTAL (MG/L AS PO4)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
NOV 01...	.03	0	0	10	10	0	<.1	0	10

01473000 PERKIOMEN CREEK AT GRATERFORD, PA

LOCATION.--Lat 40°13'46", long 75°27'07", Montgomery County, Hydrologic Unit 02040203, on left bank 1,650 ft (503 m) upstream from highway bridge at Graterford, 0.5 mi (0.8 km) upstream from Landis Brook and 2.5 mi (4.0 km) north of Collegeville.

DRAINAGE AREA.--279 mi^{2} (723 km^{2}).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1914 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to October 1950, published as "at Graters Ford."

REVISED RECORDS.--WSP 756: Drainage area. WSP 1171: 1935(M). WSP 1302: 1915-16, 1927-29. WSP 1382: 1932-33, 1935, 1937, 1942, 1947, 1948(M), 1949(P), 1950(M), 1951-52(P).

GAGE.--Water-stage recorder. Datum of gage is 112.66 ft (34.339 m) National Geodetic Vertical Datum of 1929. June 1914 to Sept. 6, 1921, nonrecording gage at site 1,650 ft (503 m) downstream at datum 3.29 ft (1.003 m) lower. Sept. 7, 1921, to Sept. 13, 1927, nonrecording gage at present site and datum.

REMARKS.--Records fair. Some regulation by Green Lane Reservoir (station 01472200) 10.5 mi (16.9 km) upstream since December 21, 1956.

AVERAGE DISCHARGE.--66 years, 389 ft^{3}/s (11.02 m^{3}/s), 18.92 in/yr (481 mm/yr), adjusted for storage since December 1956.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,900 ft^{3}/s (1,130 m^{3}/s) July 9, 1935, gage height, 18.26 ft (5.566 m), from rating curve extended above 12,000 ft^{3}/s (340 m^{3}/s) on basis of slope-area measurement at gage height 16.23 ft (4.947 m); minimum, 4.7 ft^{3}/s (0.13 m^{3}/s) Oct. 5, 1941; minimum daily, 5.6 ft^{3}/s (0.16 m^{3}/s) Oct. 5, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,100 ft^{3}/s (399 m^{3}/s) March 21, gage height, 10.55 ft (3.216 m); minimum, 33 ft^{3}/s (0.93 m^{3}/s) March 1, gage height, 0.95 ft (0.290 m), result of freezeup.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1740	185	350	260	145	120	3390	1110	155	117	85	72
2	1270	185	315	246	130	110	1690	634	169	92	83	72
3	1410	1870	270	237	125	100	870	526	219	85	76	70
4	920	940	250	210	150	105	2030	410	197	83	74	68
5	834	491	241	205	130	108	1190	330	134	88	87	70
6	1390	386	241	185	125	125	642	300	111	138	95	72
7	547	340	458	180	125	114	491	275	114	97	80	70
8	422	300	362	175	155	134	422	345	125	83	74	70
9	350	270	260	169	141	666	1310	315	114	78	72	72
10	2620	440	228	165	134	362	1560	246	148	76	70	70
11	1700	603	214	300	131	440	726	228	145	72	74	68
12	900	1350	241	2090	119	295	498	270	114	72	72	68
13	1020	642	717	589	108	223	440	2370	100	70	72	68
14	554	498	410	416	105	491	410	362	92	68	72	70
15	410	392	310	416	105	618	708	386	90	68	72	95
16	345	350	320	350	122	816	491	295	92	70	68	97
17	300	300	320	300	138	1730	362	241	92	223	70	83
18	275	275	237	290	117	3600	320	241	85	125	70	181
19	246	246	232	1050	114	1200	290	280	83	90	70	116
20	232	237	241	512	108	717	265	241	88	80	70	88
21	219	219	241	368	119	5670	250	368	85	76	70	78
22	201	205	237	320	177	3110	228	458	83	83	76	74
23	189	197	275	315	458	1190	201	285	78	113	76	74
24	519	189	488	260	368	753	201	219	80	95	74	74
25	340	185	2050	232	241	2500	193	197	78	80	74	74
26	232	4200	920	223	205	1030	185	169	78	76	72	85
27	201	2520	533	214	155	642	228	141	76	74	72	80
28	300	861	416	189	141	491	1730	128	78	76	72	76
29	275	547	356	177	130	1400	2230	119	85	138	70	74
30	223	416	320	165	---	1210	940	119	185	100	70	74
31	193	---	290	150	---	2260	---	128	---	95	72	---
TOTAL	20377	19839	12343	10958	4521	32330	24491	11736	3373	2881	2304	2403
MEAN	657	661	398	353	156	1043	816	379	112	92.9	74.3	80.1
MAX	2620	4200	2050	2090	458	5670	3390	2370	219	223	95	181
MIN	189	185	214	150	105	100	185	119	76	68	68	68
MEAN≠	657	662	397	352	1.56	1043	816	379	112	92.9	74.3	80.1
CFSM≠	2.36	2.37	1.42	1.26	.56	3.76	2.92	1.35	.37	.26	.10	.16
IN.≠	2.72	2.65	1.64	1.45	.60	4.34	3.26	1.55	.41	.30	.12	.18

CAL YR 1979 TOTAL 250353 MEAN 686 MAX 10000 MIN 57 MEAN≠ 686 CFSM≠ 2.46 IN.≠ 33.37
WTR YR 1980 TOTAL 147556 MEAN 403 MAX 5670 MIN 68 MEAN≠ 394 CFSM≠ 1.41 IN.≠ 19.23

≠ Adjusted for change in contents in Green Lane Reservoir.

01473000 PERKIOMEN CREEK AT GRATERFORD, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1975 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
MAR												
21...	1741	13500	141	6.8	9.0	2	1	0	50	29	21	46
21...	1807	13800	138	6.9	7.0	3	3	0	47	46	1	48
25...	1342	2370	161	7.4	6.5	1	1	0	6	5	1	11
29...	1705	2130	192	7.6	9.0	0	0	0	9	6	3	12
31...	1235	2640	183	7.4	7.0	0	0	0	12	10	2	14
31...	1425	3180	183	7.3	7.0	5	5	0	10	7	3	7
31...	1635	3450	174	7.2	7.0	0	0	0	14	13	1	21
APR												
01...	1610	3810	154	7.2	7.0	1	1	0	8	7	1	10
09...	0550	446	225	7.6	13.5	0	0	0	3	2	1	5
29...	1430	1960	161	7.5	13.0	0	0	0	7	7	0	6
MAY												
01...	1025	1310	197	7.5	11.0	0	0	0	6	4	2	3
01...	1312	1210	193	7.3	14.0	0	0	0	8	7	1	3
JUN												
25...	2030	68	273	8.3	26.0	0	0	0	10	10	0	7

DATE	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
MAR											
21...	43	6	51	54	1	29	32	1	150	140	10
21...	42	6	50	49	1	29	28	1	160	140	20
25...	6	5	0	0	1	3	2	1	40	20	20
29...	6	6	6	4	2	2	0	3	10	0	10
31...	8	6	43	41	2	4	1	3	40	30	10
31...	0	7	12	10	2	6	0	6	40	30	10
31...	14	7	16	16	0	8	4	4	40	30	10
APR											
01...	3	7	4	3	1	5	5	0	30	20	10
09...	0	5	2	1	1	1	1	0	10	0	10
29...	1	5	2	2	0	3	3	0	20	10	10
MAY											
01...	0	3	3	2	1	3	3	0	20	10	10
01...	0	6	1	1	0	1	1	0	10	0	20
JUN											
25...	1	6	5	5	0	0	0	2	10	0	10

01473120 SKIPPACK CREEK NEAR COLLEGEVILLE, PA

LOCATION.--Lat 40°09'52", long 75°26'01", Montgomery County, Hydrologic Unit 02040203, on right bank 60 ft (18 m) downstream from two-span highway bridge, 1.5 mi (2.4 km) upstream from mouth, and 2 mi (3 km) southeast of Collegeville.

DRAINAGE AREA.--53.7 mi^2 (139.1 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 99.03 ft (30.184 m) National Geodetic Vertical Datum of 1929. Prior to June 15, 1967, nonrecording gage at site 60 ft (18 m) upstream at same datum.

REMARKS.--Records good, except those below 20 ft^3/s, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--14 years, 82.1 ft^3/s (2.325 m^3/s), 20.77 in/yr (528 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,400 ft^3/s (1,140 m^3/s) Sept. 13, 1971, gage height, 22.5 ft (6.86 m), from floodmark, from rating curve extended above 8,400 ft^3/s (238 m^3/s) on basis of slope-area measurement of peak flow; minimum, 0.1 ft^3/s (0.003 m^3/s) Sept. 12, 13, 1966; minimum gage height, 0.79 ft (0.241 m) Oct. 3, 1968, July 31, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft^3/s (56.6 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 1	1515	3,350	94.9	7.85	2.393	Mar. 21	1545	*4,080	116	*8.58	2.615
Nov. 26	1500	4,000	113	8.50	2.591	Apr. 1	1515	2,020	57.2	6.32	1.926

Minimum daily discharge, 3.0 ft^3/s (0.085 m^3/s) many days in September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	644	28	60	34	20	12	918	73	17	12	11	4.5
2	215	27	54	30	18	11	296	52	15	11	15	4.5
3	266	480	45	28	16	10	154	52	15	10	14	4.5
4	139	143	42	22	17	12	321	36	14	12	12	4.0
5	342	91	38	23	16	15	148	29	13	15	11	4.0
6	217	74	37	22	14	20	94	25	12	30	80	5.0
7	114	64	55	18	13	16	73	21	14	18	20	4.0
8	86	59	35	18	14	15	61	45	18	14	16	4.0
9	87	53	26	15	15	53	277	26	16	12	14	4.0
10	1060	88	25	23	14	28	234	18	17	11	12	3.5
11	309	84	23	120	13	64	108	16	15	10	10	3.0
12	196	282	21	301	12	37	79	23	14	10	15	3.0
13	176	114	43	82	11	34	65	271	13	10	12	3.0
14	110	92	58	68	10	267	58	74	12	9.5	10	3.0
15	86	74	37	60	12	241	68	53	12	9.0	9.0	4.0
16	71	66	34	50	20	275	50	41	15	8.0	11	5.0
17	62	60	41	44	15	358	40	34	13	15	9.5	4.0
18	59	55	27	49	12	356	35	40	12	11	8.5	3.5
19	53	48	27	183	15	130	31	35	12	10	8.0	3.0
20	47	44	26	77	14	95	26	27	12	9.0	7.5	3.0
21	41	39	29	62	12	1060	23	64	12	8.5	7.0	3.0
22	36	36	24	57	40	331	19	47	12	9.0	7.0	3.0
23	31	33	32	57	98	137	17	31	11	10	6.5	3.0
24	69	30	48	44	35	100	16	23	11	9.0	6.0	3.0
25	43	27	179	40	25	322	14	19	11	8.5	6.0	6.0
26	34	1040	89	37	18	122	13	19	10	8.0	6.0	30
27	29	252	65	40	15	87	19	17	11	8.0	6.0	10
28	38	127	55	34	14	70	68	16	13	10	5.5	6.0
29	44	90	49	30	13	251	117	15	11	20	5.0	5.0
30	33	70	43	26	---	162	55	14	20	15	5.0	4.0
31	30	---	38	23	---	894	---	15	---	12	5.0	---
TOTAL	4767	3770	1405	1717	561	5585	3497	1271	403	364.5	370.5	149.5
MEAN	154	126	45.3	55.4	19.3	180	117	41.0	13.4	11.8	12.0	4.98
MAX	1060	1040	179	301	98	1060	918	271	20	30	80	30
MIN	29	27	21	15	10	10	13	14	10	8.0	5.0	3.0
CFSM	2.87	2.35	.84	1.03	.36	3.35	2.18	.76	.25	.22	.22	.09
IN.	3.30	2.61	.97	1.19	.39	3.87	2.42	.88	.28	.25	.26	.10

CAL YR 1979 TOTAL 48692.9 MEAN 133 MAX 2670 MIN 6.5 CFSM 2.48 IN 33.73
WTR YR 1980 TOTAL 23860.5 MEAN 65.2 MAX 1060 MIN 3.0 CFSM 1.21 IN 16.53

01473120 SKIPPACK CREEK NEAR COLLEGEVILLE, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water Year 1973, December 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM SUSPENDED RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAR												
21...	1507	3840	141	6.7	12.0	0	0	0	54	31	23	110
21...	1820	1860	138	6.9	9.0	1	1	0	42	25	17	39
25...	1307	247	216	7.2	7.0	0	0	0	6	5	1	8
29...	1803	463	--	--	--	0	0	0	8	5	3	8
31...	1205	1950	154	7.1	7.0	0	0	0	17	16	1	45
31...	1405	1480	148	7.0	7.0	0	0	0	14	13	1	17
31...	1545	1270	148	7.0	7.0	0	0	0	8	7	1	23
APR												
01...	1942	926	145	7.0	7.0	0	0	0	8	7	1	11
09...	0700	66	288	7.4	14.0	0	0	0	5	4	1	6
09...	0900	155	262	7.2	13.0	0	0	0	8	7	1	14
29...	1215	111	342	7.6	12.0	0	0	0	6	6	0	13
JUN												
25...	2100	12	1004	8.3	26.0	0	0	0	9	9	0	8

DATE	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
MAR											
21...	88	22	99	98	1	61	61	0	380	370	10
21...	21	18	55	54	1	24	22	2	140	130	10
25...	2	6	10	10	0	3	3	0	20	0	20
29...	3	5	6	3	3	2	0	5	30	20	10
31...	37	8	44	44	0	14	11	3	90	80	10
31...	11	6	29	29	0	8	5	3	60	50	10
31...	15	8	20	17	3	8	4	4	50	40	10
APR											
01...	7	4	14	14	0	7	5	2	40	30	10
09...	3	3	2	2	0	0	0	0	10	0	10
09...	10	4	16	16	0	2	2	0	40	30	10
29...	5	8	2	2	0	2	2	0	20	10	10
JUN											
25...	1	7	2	2	0	0	0	1	10	0	10

DATE	TIME	ANTIMONY, TOTAL IN BOTTOM MATERIAL (UG/G)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)
NOV										
15...	1200	0	0	1	<10	20	30	60	.00	30

DATE	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	SILVER, RECOV. FM BOTTOM MATERIAL (UG/G AS AG)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)
NOV										
15...	0	<1	110	12	.0	12	27	.0	19	6.6

DATE	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
NOV									
15...	1.9	5.1	1.1	.0	.0	.0	.0	.0	0

01473800 SCHUYLKILL RIVER AT MANAYUNK, PHILADELPHIA, PA

WATER-DISCHARGE RECORDS

LOCATION.--Lat 40°01'41", long 75°13'44", Philadelphia County, Hydrologic Unit 02040203, at Green Lane Avenue Bridge, 5.5 mi (8.8 km) upstream from gaging station at Fairmount Dam, and 14.2 mi (22.3 km) upstream from mouth.

DRAINAGE AREA.--1,830 mi² (4,740 km²), at Fairmount Dam.

PERIOD OF DAILY RECORD.--
SUSPENDED SEDIMENT DISCHARGE: November 1947 to current year.

REMARKS.--Mean discharge given are for 01474500 Schuylkill River at Philadelphia (Fairmount Dam). Daily records do not include water diverted by the city of Philadelphia for municipal water supply. Unpublished records of temperature of sediment samples available in the district office in Harrisburg.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily, 4,910 mg/L Dec. 30, 1948; minimum daily, 1 mg/L on many days.
SEDIMENT LOADS: Maximum daily, 650,000 tons (590,000 tonnes) (estimated) Aug. 19, 1955; minimum daily, less than 0.05 ton (0.04 tonne) Sept. 2, 1966.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily, 771 mg/L Mar. 22; minimum daily, 1 mg/L Aug. 24 to Aug. 29.
SEDIMENT LOADS: Maximum daily, 50,600 tons (45,900 tonnes) Mar. 22; minimum daily, 0.72 tons (0.65 tonnes) Aug. 29.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
MAR								
18...	1400	10400	149	6.8	7.0	0	0	0
22...	0022	31600	184	7.0	8.0	0	0	0
22...	0245	33400	166	7.3	--	0	0	0
25...	0850	10900	208	7.5	7.0	0	0	0
25...	1430	11900	224	7.2	8.0	0	0	0
29...	0925	7000	266	7.6	8.5	--	--	--
29...	1715	6760	264	7.6	9.0	--	--	--
29...	2200	8280	250	7.3	8.9	--	--	--
30...	0830	7540	235	7.4	9.0	1	1	0
30...	1440	6820	233	7.2	9.5	1	1	0
APR								
01...	1425	13300	215	7.2	9.5	0	0	0
MAY								
08...	2135	3380	287	7.1	--	0	0	0
12...	2300	3070	316	7.6	18.3	--	--	--
13...	0950	5730	295	7.6	18.0	0	0	0
13...	1455	11200	278	7.3	19.0	--	--	--
13...	2210	8360	236	7.6	--	0	0	0
14...	0405	7260	217	7.3	18.0	--	--	--
14...	1110	6190	238	6.9	19.0	--	--	--
14...	2330	5110	276	7.7	18.6	--	--	--
25...	0540	2350	313	7.5	--	1	1	0
29...	0610	1660	334	7.7	--	0	0	0
JUN								
26...	0225	708	443	8.6	24.5	0	0	0

01473800 SCHUYLKILL RIVER AT MANAYUNK, PHILADELPHIA, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)
MAR									
18...	20	--	--	19	10	9	20	12	8
22...	25	24	1	96	88	8	110	110	0
22...	40	38	2	61	54	7	81	81	0
25...	10	8	2	24	18	6	18	18	0
25...	7	3	4	28	19	9	17	17	0
29...	--	--	--	25	17	8	6	5	1
29...	--	--	--	15	4	11	7	6	1
29...	--	--	--	19	13	6	9	8	1
30...	8	7	1	19	11	8	6	6	0
30...	8	6	2	19	11	8	5	5	0
APR									
01...	9	6	3	30	24	6	9	9	0
MAY									
08...	5	4	1	6	0	6	4	4	0
12...	--	--	--	7	3	4	5	3	2
13...	9	8	1	16	11	5	15	14	1
13...	--	--	--	22	15	7	37	35	2
13...	8	5	3	12	7	5	14	14	0
14...	--	--	--	17	11	6	17	17	0
14...	--	--	--	19	10	9	16	15	1
14...	--	--	--	12	5	7	9	7	2
25...	11	10	1	7	3	4	4	4	0
29...	10	9	1	8	6	2	4	4	0
JUN									
26...	12	11	1	8	2	6	5	5	0

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
MAR								
18...	13	6	7	90	50	40	6.8	3.8
22...	61	56	5	410	400	10	50	4.4
22...	39	36	3	270	260	10	42	4.2
25...	9	4	5	80	60	20	3.5	2.0
25...	12	6	6	60	40	20	--	--
29...	--	--	--	--	--	--	2.3	--
29...	--	--	--	--	--	--	2.8	--
29...	--	--	--	--	--	--	2.0	--
30...	7	2	5	70	50	20	12	2.3
30...	6	1	5	40	20	20	4.2	2.5
APR								
01...	6	2	4	50	30	20	4.3	2.7
MAY								
08...	5	2	3	40	10	30	3.8	2.7
12...	--	--	--	--	--	--	--	2.4
13...	6	3	3	100	80	20	2.4	2.0
13...	--	--	--	--	--	--	3.8	2.4
13...	10	8	2	5	0	10	11	4.3
14...	--	--	--	--	--	--	7.4	3.8
14...	--	--	--	--	--	--	4.4	4.2
14...	--	--	--	--	--	--	5.5	5.4
25...	7	4	3	50	40	10	--	--
29...	6	5	1	50	40	10	--	5.1
JUN								
26...	1	0	2	40	30	10	3.9	.3

SCHUYLKILL RIVER BASIN

01473800 SCHUYLKILL RIVER AT MANAYUNK, PHILADELPHIA, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	PCB TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)
MAR									
18...	1400	.00	.0	.00	.0	.00	.00	.00	.00
22...	0022	.30	.0	.00	.0	.00	.00	.00	.00
22...	0245	.30	.0	.00	.0	.00	.00	.00	.00
25...	0850	.20	.0	.00	.0	.00	.00	.00	.00
30...	0830	.00	.0	.00	.0	.00	.00	.00	.00
30...	1440	.00	.0	.00	.0	.00	.00	.00	.00
APR									
01...	1425	.10	.0	.00	.0	.00	.00	.00	.00
MAY									
08...	2135	.10	.0	.00	.0	.00	.00	.00	.00
13...	0950	.30	.0	.00	.0	.00	.00	.00	.00
13...	2210	.10	.0	.00	.0	.00	.00	.00	.00
14...	1110	.10	.0	.00	.0	.00	.00	.00	.00

DATE	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)
MAR									
18...	.00	.00	.00	.00	.00	.00	.00	.00	0
22...	.00	.00	.00	.00	.00	.00	.00	--	0
22...	.00	.00	.00	.00	.00	.00	.00	--	0
25...	.00	.00	.00	.00	.00	.00	.00	.00	0
30...	.00	.00	.00	.00	.00	.00	.00	.00	0
30...	.00	.00	.00	.00	.00	.00	.00	.00	0
APR									
01...	.00	.00	.00	.00	.00	.00	.00	.00	0
MAY									
08...	.00	.00	.00	.00	.00	.00	.00	.00	0
13...	.00	.00	.00	.00	.00	.00	.00	.00	0
13...	.00	.00	.00	.00	.00	.00	.00	.00	0
14...	.00	.00	.00	.00	.00	.00	.00	.00	0

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	SODIUM+ POTAS-SIUM DIS-SOLVED (MG/L AS NA)
FEB												
21...	1000	1160	460	7.3	160	90	39	15	26	26	.9	29

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE. DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
FEB											
21...	3.0	69	80	33	.2	7.8	281	257	.38	880	2.7

01473800 SCHUYLKILL RIVER AT MANAYUNK, PHILADELPHIA, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ANTIMONY, TOTAL IN BOTTOM MATERIAL (UG/G)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)
NOV										
13...	1115	0	0	3	<10	50	90	220	.00	50

DATE	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	SILVER, RECOV. FM BOTTOM MATERIAL (UG/G AS AG)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)
NOV										
13...	0	<1	540	29	3.6	33	100	.0	57	.0

DATE	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
NOV									
13...	2.5	1.1	5.4	.0	.0	.0	.0	.0	0

01473800 SCHUYLKILL RIVER AT MANAYUNK, PHILADELPHIA, PA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L) OCTOBER	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L) NOVEMBER	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L) DECEMBER	SEDIMENT DISCHARGE (TONS/DAY)
1	4720	75	1680	1350	5	18	2860	6	46
2	12400	208	6960	1380	5	19	2290	4	25
3	8940	89	2150	4950	30	401	2150	4	23
4	8870	80	1920	5070	14	192	2030	3	16
5	7460	60	1210	3160	10	85	1940	4	21
6	9820	88	2330	2610	8	56	1850	2	10
7	7190	54	1050	2380	7	45	2030	2	11
8	5810	27	424	2200	7	42	1980	3	16
9	5010	25	338	2020	8	44	1620	4	17
10	11000	75	2230	2290	8	49	1460	3	12
11	8680	54	1270	2850	13	100	1350	2	7.3
12	4840	16	209	4360	15	177	1280	3	10
13	4840	20	261	3010	11	89	1420	3	12
14	3630	12	118	2560	10	69	2330	8	50
15	2910	8	63	2330	7	44	2070	4	22
16	2570	7	49	2020	5	27	1650	3	13
17	2290	7	43	1940	4	21	1620	8	35
18	1940	6	31	1770	4	19	1540	7	29
19	1770	7	33	1690	4	18	1320	10	36
20	1620	7	31	1610	4	17	1320	9	32
21	1540	7	29	1530	4	17	1250	5	17
22	1460	7	28	1460	4	16	1280	3	10
23	1420	7	27	1420	4	15	1320	2	7.1
24	2520	11	75	1380	4	15	1540	1	4.2
25	2910	10	79	1350	5	18	3910	30	317
26	1810	6	29	6100	129	5170	6800	54	991
27	1690	4	18	9920	172	6050	5320	26	373
28	1580	5	21	5080	21	288	4080	16	176
29	1850	5	25	3800	12	123	3260	8	70
30	2070	6	34	3320	8	72	2860	5	39
31	1730	6	28	---	---	---	2620	4	28
TOTAL	136890	---	22793	86910	---	13316	70350	---	2475.6

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L) JANUARY	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L) FEBRUARY	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L) MARCH	SEDIMENT DISCHARGE (TONS/DAY)
1	2330	5	31	1050	6	17	598	7	11
2	2150	3	17	1000	7	19	572	7	11
3	1980	3	16	950	8	21	625	7	12
4	1810	5	24	950	7	18	706	4	7.6
5	1620	4	17	883	7	17	678	3	5.5
6	1500	5	20	883	7	17	734	4	7.9
7	1420	3	12	852	6	14	678	4	7.3
8	1390	2	7.5	822	7	16	651	4	7.0
9	1320	3	11	822	8	18	1310	10	35
10	1210	2	6.5	792	6	13	1570	9	38
11	1460	6	24	763	6	12	1490	25	101
12	5920	53	847	763	6	12	1460	20	79
13	3320	40	359	706	5	9.5	1210	20	65
14	2240	18	109	678	5	9.2	2520	16	109
15	2110	10	57	651	5	8.8	2470	13	87
16	2110	9	51	822	5	11	2710	11	80
17	1900	9	46	822	6	13	3310	15	134
18	1730	8	37	651	6	11	10100	175	5030
19	3010	15	122	651	5	8.8	9820	68	1800
20	2380	13	84	651	5	8.8	6790	61	1120
21	1980	12	64	822	6	13	12200	388	27100
22	1600	9	39	914	7	17	21700	771	50600
23	1500	8	32	1650	12	53	13300	180	6460
24	1400	7	26	1530	16	66	8650	68	1590
25	1300	6	21	1420	15	58	10600	65	1860
26	1250	6	20	1170	10	32	7940	53	1140
27	1200	6	19	1040	9	25	6070	28	459
28	1200	5	16	914	8	20	5070	18	246
29	1150	4	12	852	8	18	5870	22	349
30	1100	6	18	---	---	---	8000	34	734
31	1050	4	11	---	---	---	10000	50	1350
TOTAL	57640	---	2176.0	26474	---	576.1	159402	---	100635.3

01473800 SCHUYLKILL RIVER AT MANAYUNK, PHILADELPHIA, PA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L) APRIL	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L) MAY	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L) JUNE	SEDIMENT DISCHARGE (TONS/DAY)
1	13000	100	3510	8580	47	1090	1890	14	71
2	9000	37	899	6530	32	564	1980	15	80
3	7320	26	514	5500	24	356	1980	15	80
4	8720	57	1340	4660	20	252	1980	12	64
5	7800	58	1220	3910	18	190	1810	16	78
6	5430	21	308	3260	14	123	1530	15	62
7	4480	16	194	2760	12	89	1380	12	45
8	3740	12	121	3060	16	132	1460	12	47
9	5680	31	475	2660	17	122	1690	13	59
10	9820	69	1830	2290	14	87	1690	16	73
11	7320	49	968	2150	13	75	1810	18	88
12	5680	26	399	2330	14	88	1650	17	76
13	4950	19	254	7250	85	1660	1490	14	56
14	4480	15	181	6590	95	1690	1380	11	41
15	5940	34	545	4720	30	382	1460	10	39
16	5810	37	580	3740	18	182	1650	14	62
17	4890	17	224	3160	18	154	1530	16	66
18	4300	15	174	3110	22	185	1420	13	50
19	3740	13	131	3210	25	217	1280	16	55
20	3370	11	100	2950	35	279	1210	18	59
21	3110	10	84	3160	16	137	1010	20	55
22	2760	10	75	4020	24	260	1010	21	57
23	2560	12	83	3110	15	126	1010	18	49
24	2380	15	96	2520	11	75	852	17	39
25	2330	16	101	2330	13	82	792	15	32
26	2020	13	71	2110	15	85	734	15	30
27	2020	12	65	1890	18	92	734	16	32
28	5190	42	589	1610	19	83	651	17	30
29	10400	112	3140	1650	26	116	706	15	29
30	8220	65	1440	1650	19	85	1240	19	64
31	---	---	---	1770	16	76	---	---	---
TOTAL	166460	---	19711	108240	---	9134	41009	---	1668

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L) JULY	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L) AUGUST	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L) SEPTEMBER	SEDIMENT DISCHARGE (TONS/DAY)
1	1140	16	49	598	13	21	339	2	1.8
2	883	15	36	522	12	17	317	3	2.6
3	706	16	30	572	14	22	264	4	2.9
4	678	17	31	493	15	20	272	3	2.2
5	678	18	33	691	16	30	268	3	2.2
6	1140	26	80	1030	20	56	266	3	2.2
7	914	23	57	695	14	26	298	5	4.0
8	763	21	43	456	11	14	288	5	3.9
9	678	19	35	365	10	9.9	235	5	3.2
10	625	18	30	345	10	9.3	250	6	4.1
11	598	17	27	400	12	13	220	6	3.6
12	547	15	22	740	14	28	228	6	3.7
13	547	17	25	551	8	12	242	4	2.6
14	522	17	24	466	6	7.5	250	4	2.7
15	450	14	17	446	5	6.0	305	4	3.3
16	651	19	33	456	4	4.9	349	5	4.7
17	852	20	46	427	3	3.5	391	4	4.2
18	1140	17	52	415	7	7.8	1080	18	52
19	678	19	35	422	8	9.1	1150	13	40
20	497	14	19	364	6	5.9	515	9	13
21	474	14	18	381	6	6.2	436	8	9.4
22	450	13	16	367	5	5.0	346	8	7.5
23	651	14	25	389	2	2.1	300	7	5.7
24	734	14	28	379	1	1.0	286	7	5.4
25	792	18	38	360	1	.97	350	6	5.7
26	734	16	32	329	1	.89	630	12	20
27	572	15	23	296	1	.80	600	9	15
28	497	15	20	272	1	.73	550	7	10
29	651	17	30	268	1	.72	430	7	8.1
30	734	16	32	260	2	1.4	450	6	7.3
31	598	15	24	302	2	1.6	---	---	---
TOTAL	21574	---	1010	14057	---	344.31	11905	---	253.0

01473950 WISSAHICKON CREEK AT BELLS MILL ROAD, PHILADELPHIA, PA

LOCATION.--Lat 40°04'50", long 75°13'35", Philadelphia County, Hydrologic Unit 02040203, on left bank 300 ft (91 m) upstream from Bells Mill Road, 0.5 mi (0.8 km) south of Mt. St. Joseph College in Philadelphia.

DRAINAGE AREA.--53.6 mi^2 (139 km^2).

WATER-DISCHARGE RECORD

PERIOD OF RECORD.--October 1965 to September 1970, May 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 108.58 ft (33.095 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--11 years (Water years 1966-70, 1975-80), 77.8 ft^3/s (2.203 m^3/s), 19.72 in/yr (501 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,830 ft^3/s (137 m^3/s) Jan. 25, 1979, gage height, 10.11 ft (3.082 m); minimum, 5.4 ft^3/s (0.15 m^3/s) July 27, 1966, gage height, 2.81 ft (0.856 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 29, 1973, reached a stage of 12.66 ft (3.859 m), from floodmarks, discharge, 8,100 ft^3/s (229 m^3/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft^3/s (28.3 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 1	1830	2,010	56.9	7.15	2.179	Apr. 1	1930	1,530	43.3	6.48	1.975
Oct. 10	0600	1,030	29.2	5.70	1.737	Apr. 9	1345	1,310	37.1	6.17	1.881
Nov. 26	1545	1,090	30.9	5.80	1.768	Apr. 10	0500	1,140	43.0	5.89	1.795
Mar. 21	1900	*2,050	58.1	*7.20	2.195	Aug. 5	unknown	2,000	32.3	unknown	
Mar. 25	0515	1,090	30.9	5.80	1.768	Aug. 6	unknown	1,000	28.3	unknown	
Mar. 31	2100	1,280	36.2	6.12	1.865						

Minimum discharge, 16 ft^3/s (0.45 m^3/s) Sept. 2; minimum gage height, 2.84 ft (0.866 m) Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	711	51	53	47	40	35	836	134	54	33	36	28
2	205	54	50	45	39	38	379	94	47	32	31	24
3	137	346	48	45	38	34	232	141	48	32	32	26
4	101	96	56	42	37	37	402	79	50	35	30	26
5	253	71	56	42	37	55	216	71	41	58	150	24
6	175	67	58	41	39	45	155	69	40	84	300	32
7	101	63	75	41	37	50	134	63	40	35	35	26
8	89	60	58	42	36	60	121	118	40	31	30	23
9	104	58	51	45	36	75	500	69	40	33	25	23
10	833	118	51	44	35	70	495	58	56	40	25	25
11	244	91	53	151	38	110	179	58	41	29	27	24
12	167	248	51	314	40	50	144	75	40	27	80	24
13	148	86	84	75	38	58	131	248	40	25	30	25
14	107	77	75	67	36	322	131	84	40	26	27	28
15	94	69	54	67	36	175	144	67	37	25	28	35
16	89	69	45	60	56	137	109	65	47	31	28	26
17	82	65	56	58	44	131	99	60	40	37	30	24
18	75	61	50	71	35	205	94	84	38	28	28	127
19	71	61	51	183	35	96	89	69	38	26	24	32
20	69	60	47	73	36	82	84	65	40	24	25	30
21	63	58	45	65	38	780	82	118	38	22	25	29
22	61	58	45	60	60	283	77	75	36	28	24	26
23	61	54	51	67	95	124	75	61	36	54	23	24
24	75	50	63	54	45	109	71	53	41	30	26	23
25	63	47	155	51	40	445	71	50	41	30	24	30
26	61	368	69	48	40	134	69	44	37	28	22	35
27	60	131	58	47	50	107	84	45	38	27	21	28
28	65	77	53	47	40	96	205	44	37	28	21	25
29	63	67	50	47	38	232	194	44	35	107	23	25
30	58	58	48	44	---	163	99	44	60	56	24	24
31	53	---	47	42	---	701	---	48	---	33	29	---
TOTAL	4538	2839	1806	2125	1214	5039	5701	2397	1256	1134	1283	901
MEAN	146	94.6	58.3	68.5	41.9	163	190	77.3	41.9	36.6	41.4	30.0
MAX	833	368	155	314	95	780	836	248	60	107	300	127
MIN	53	47	45	41	35	34	69	44	35	22	21	23
CFSM	2.72	1.77	1.09	1.28	.78	3.04	3.55	1.44	.78	.68	.77	.56
IN.	3.15	1.97	1.25	1.47	.84	3.50	3.96	1.66	.87	.79	.89	.63

CAL YR 1979 TOTAL 47460 MEAN 130 MAX 2160 MIN 22 CFSM 2.43 IN 32.94
WTR YR 1980 TOTAL 30233 MEAN 82.6 MAX 836 MIN 21 CFSM 1.54 IN 20.98

01473950 WISSAHICKON CREEK AT BELLS MILL ROAD, PHILADELPHIA, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1979 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ANTIMONY, TOTAL IN BOTTOM MATERIAL (UG/G)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)
NOV 13...	1400	0	0	2	<10	20	40	110	.00	20

DATE	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	SILVER, RECOV. FM BOTTOM MATERIAL (UG/G AS AG)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)
NOV 13...	0	1	140	17	1.5	18	8	.0	32	6.7

DATE	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
NOV 13...	10	3.0	3.3	.0	4.8	.0	.0	.0	0

01474000 WISSAHICKON CREEK AT MOUTH, PHILADELPHIA, PA

LOCATION.--Lat 40°00'54", long 75°12'24", Philadelphia County, Hydrologic Unit 02040203, on left bank 100 ft (30 m) upstream from dam at Ridge Ave., 750 ft (229 m) upstream from mouth, 1,000 ft (305 m) northwest of Gustine Lake in Philadelphia.

DRAINAGE AREA.--64.0 mi^2 (165.8 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1897 to September 1903, January 1905 to July 1906, October 1965 to September 1970, May 1974 to current year. Prior to October 1965 published as "near Philadelphia."

REVISED RECORDS.--WSP 1302: 1905.

GAGE.--Water-stage recorder, concrete control, and crest-stage gage. Datum of gage is 26.41 ft (8.050 m) National Geodetic Vertical Datum of 1929. Prior to October 1965, water-stage recorder at about same site and datum.

REMARKS.--Records good. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--12 years (Water years 1898, 1966-70, 1975-80), 96.3 ft^3/s (2.727 m^3/s), 20.43 in/yr (519 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,890 ft^3/s (138 m^3/s) Jan. 25, 1979, gage height, 6.81 ft (2.076 m); minimum daily observed, 2.0 ft^3/s (0.057 m^3/s) July 18, 19, 1905.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 29, 1973, reached a stage of 7.92 ft (2.414 m), discharge, 6,870 ft^3/s (195 m^3/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft^3/s (34.0 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 1	1930	2,350	66.6	5.03	1.533	Apr. 1	1945	1,880	53.2	4.63	1.411
Oct. 10	0800	1,230	34.8	4.01	1.222	Apr. 9	1515	1,610	45.6	4.38	1.335
Nov. 26	1700	1,230	34.8	4.01	1.222	Apr. 10	0600	1,380	39.1	4.16	1.268
Mar. 21	1945	*2,480	70.2	*5.14	1.567	Aug. 5	2030	2,420	68.5	5.09	1.551
Mar. 25	0600	1,450	41.1	4.23	1.289	Aug. 6	0530	1,290	36.5	4.07	1.241
Mar. 31	1700	1,700	48.1	4.46	1.359						

Minimum discharge, 22 ft^3/s (0.62 m^3/s) Sept. 3, 13, gage height, 1.82 ft (0.555 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	892	58	70	59	49	46	1050	186	76	43	51	33
2	260	65	65	56	48	47	495	132	58	40	42	30
3	162	394	60	57	47	46	306	189	69	42	44	25
4	125	119	70	53	45	49	511	113	63	41	41	27
5	295	85	70	55	45	66	283	103	54	53	215	27
6	243	79	77	51	48	57	220	98	49	156	422	29
7	121	77	100	50	46	58	181	96	49	45	46	32
8	108	72	76	52	45	77	173	172	50	41	39	27
9	125	71	69	56	45	88	646	100	51	41	35	24
10	973	140	69	54	45	87	626	89	78	51	31	25
11	303	109	71	145	47	143	239	88	58	41	32	24
12	185	283	72	419	48	70	200	118	49	37	119	24
13	167	103	109	93	46	90	184	311	52	34	42	24
14	114	92	109	80	43	370	182	116	51	35	34	25
15	100	80	72	77	43	210	201	92	48	37	36	53
16	96	81	61	72	77	180	156	90	73	85	36	41
17	90	80	71	69	60	167	142	84	53	66	35	39
18	87	77	66	84	43	254	135	120	50	41	35	213
19	84	75	68	216	42	134	130	102	50	37	32	38
20	81	76	63	91	44	114	122	95	54	35	30	34
21	78	73	59	80	45	985	119	157	51	33	30	33
22	75	73	60	76	73	384	116	104	48	50	30	32
23	75	70	67	81	113	175	114	86	45	87	28	29
24	93	68	82	68	57	157	110	74	47	44	29	29
25	75	63	192	63	48	618	107	71	61	40	29	38
26	75	418	89	60	49	197	106	67	47	42	26	44
27	70	177	70	56	59	160	130	69	46	46	28	39
28	78	98	66	57	54	143	273	63	46	44	25	32
29	78	84	63	58	57	315	250	63	43	137	25	32
30	70	75	61	54	---	240	140	61	89	136	27	30
31	65	---	56	53	---	918	---	69	---	45	34	---
TOTAL	5443	3415	2353	2595	1511	6645	7647	3378	1658	1705	1706	1132
MEAN	176	114	75.9	83.7	52.1	214	255	109	55.3	55.0	55.0	37.7
MAX	973	418	192	419	113	985	1050	311	89	156	422	213
MIN	65	58	56	50	42	46	106	61	43	33	25	24
CFSM	2.75	1.78	1.19	1.31	.81	3.34	3.98	1.70	.86	.86	.86	.59
IN.	3.16	1.98	1.37	1.51	.88	3.86	4.44	1.96	.96	.99	.99	.66

CAL YR 1979 TOTAL 59644 MEAN 163 MAX 2640 MIN 38 CFSM 2.55 IN 34.67
WTR YR 1980 TOTAL 39188 MEAN 107 MAX 1050 MIN 24 CFSM 1.67 IN 22.78

01474000 WISSAHICKON CREEK AT MOUTH, PHILADELPHIA, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1975 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
MAR												
22...	0147	796	171	7.3	--	0	0	0	13	12	1	30
25...	0815	1060	199	7.4	7.5	0	0	0	20	19	1	34
25...	1110	570	194	7.5	7.0	0	0	0	9	8	1	16
25...	1320	422	201	7.2	8.0	0	0	0	9	0	14	16
29...	1132	332	394	7.6	9.0	0	0	0	8	5	3	17
JUN												
26...	0310	51	552	8.2	22.5	0	0	0	9	0	0	8

DATE	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
MAR											
22...	22	8	80	78	2	10	9	1	130	110	20
25...	28	6	78	77	1	10	10	0	110	100	10
25...	7	9	40	38	2	7	7	0	50	30	20
25...	6	10	90	89	1	6	4	2	40	20	20
29...	6	11	22	20	2	4	0	5	30	20	10
JUN											
26...	1	7	6	6	0	0	0	1	10	0	10

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)
OCT										
10...	1300	1040	169	7.7	10.0	0	6	10	26	4
MAR										
22...	0147	796	171	7.3	--	0	13	30	80	10
25...	0815	1060	199	7.4	7.5	0	20	34	78	10
25...	1110	570	194	7.5	7.0	0	9	16	40	7
25...	1320	422	201	7.2	8.0	0	9	16	90	6
29...	1132	332	394	7.6	9.0	0	8	17	22	4
JUN										
26...	0310	51	552	8.2	22.5	0	9	8	6	0

01474000 WISSAHICKON CREEK AT MOUTH, PHILADELPHIA, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PCB TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)
OCT									
10...	30	.00	.0	.00	.0	.00	.00	.00	.00
MAR									
22...	130	--	--	--	--	--	--	--	--
25...	110	--	--	--	--	--	--	--	--
25...	50	--	--	--	--	--	--	--	--
25...	40	--	--	--	--	--	--	--	--
29...	30	--	--	--	--	--	--	--	--
JUN									
26...	10	--	--	--	--	--	--	--	--

DATE	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)
OCT									
10...	.00	.00	.00	.00	.00	.00	.00	.00	0
MAR									
22...	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--
JUN									
26...	--	--	--	--	--	--	--	--	--

DATE	TIME	ANTI-MONY, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BERYL-LIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)
NOV										
13...	1220	0	0	2	<10	20	50	260	.00	20

DATE	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	SILVER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS AG)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
NOV										
13...	0	1	160	22	3.4	25	110	.0	120	37

DATE	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
NOV									
13...	15	22	11	.0	.0	1.4	.0	.0	0

DATE	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
NOV									
13...	15	22	11	.0	.0	1.4	.0	.0	0

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA

LOCATION.--Lat 39°58'00", long 75°11'20", Philadelphia County, Hydrologic Unit 02040203, on right bank 150 ft (46 m) upstream from Fairmount Dam, 1,500 ft (457 m) upstream from Spring Garden Street Bridge, in Philadelphia, and 8.7 mi (14.0 km) upstream from mouth. Water-quality sampling site 1.6 mi (1.6 km) upstream.

DRAINAGE AREA.--1,893 mi^2 (4,903 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1931 to current year. Records for January 1898 to December 1912, published in WSP 35, 48, 65, 82, 97, 125, 166, 202, 241, 261, 301, 381 have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1302: 1936(M). WSP 1432: 1945. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 5.74 ft (1.750 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 25, 1956, water-stage recorder at site on right bank just upstream from Fairmount Dam at same datum. Nov. 26, 1956, to Oct. 6, 1966, water-stage recorder at site on left bank 40 ft (12 m) upstream from Fairmount Dam at same datum.

REMARKS.--Records good. Some regulation by reservoirs above station. Records of daily discharge do not include diversion above station by city of Philadelphia for municipal water supply.

AVERAGE DISCHARGE.--49 years, 2,962 ft^3/s (83.88 m^3/s), 21.25 in/yr (540 mm/yr), adjusted for diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 103,000 ft^3/s (2,920 m^3/s) June 23, 1972, gage height, 14.65 ft (4.465 m); no flow over dam at times; minimum daily, 0.6 ft^3/s (0.02 m^3/s) Sept. 2, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 4, 1869, reached a stage of 17.0 ft (5.18 m), discharge, 135,000 ft^3/s (3,820 m^3/s), from rating extended above 46,000 ft^3/s (1,300 m^3/s). Flood of Mar. 1, 1902, reached a stage of 14.8 ft (4.511 m), discharge, 98,000 ft^3/s (2,780 m^3/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 18,000 ft^3/s (510 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 26	2215	19,600	555	8.70	2.652	Mar. 21	2400	*30,200	856	*9.76	2.975

Minimum discharge, 176 ft^3/s (4.98 m^3/s) Sept. 9, 25, gage height, 5.62 ft (1.713 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4720	1350	2860	2330	1050	598	13000	8580	1890	1140	598	339
2	12400	1380	2290	2150	1000	572	9000	6530	1980	883	522	317
3	8940	4950	2150	1980	950	625	7320	5500	1980	706	572	264
4	8870	5070	2030	1810	950	706	8720	4660	1980	678	493	272
5	7460	3160	1940	1620	883	678	7800	3910	1810	678	691	268
6	9820	2610	1850	1500	883	734	5430	3260	1530	1140	1030	266
7	7190	2380	2030	1420	852	678	4480	2760	1380	914	695	298
8	5810	2200	1980	1390	822	651	3740	3060	1460	763	456	288
9	5010	2020	1620	1320	822	1310	5680	2660	1690	678	365	235
10	11000	2290	1460	1210	792	1570	9820	2290	1690	625	345	250
11	8680	2850	1350	1460	763	1490	7320	2150	1810	598	400	220
12	4840	4360	1280	5920	763	1460	5680	2330	1650	547	740	228
13	4840	3010	1420	3320	706	1210	4950	7250	1490	547	551	242
14	3630	2560	2330	2240	678	2520	4480	6590	1380	522	466	250
15	2910	2330	2070	2110	651	2470	5940	4720	1460	450	446	305
16	2570	2020	1650	2110	822	2710	5810	3740	1650	651	456	349
17	2290	1940	1620	1900	822	3310	4890	3160	1530	852	427	391
18	1940	1770	1540	1730	651	10100	4300	3110	1420	1140	415	1080
19	1770	1690	1320	3010	651	9820	3740	3210	1280	678	422	1150
20	1620	1610	1320	2380	651	6790	3370	2950	1210	497	364	515
21	1540	1530	1250	1980	822	12200	3110	3160	1010	474	381	436
22	1460	1460	1280	1600	914	21700	2760	4020	1010	450	367	346
23	1420	1420	1320	1500	1650	13300	2560	3110	1010	651	389	300
24	2520	1380	1540	1400	1530	8650	2380	2520	852	734	379	286
25	2910	1350	3910	1300	1420	10600	2330	2330	792	792	360	350
26	1810	6100	6800	1250	1170	7940	2020	2110	734	734	329	630
27	1690	9920	5320	1200	1040	6070	2020	1890	734	572	296	600
28	1580	5080	4080	1200	914	5070	5190	1610	651	497	272	550
29	1850	3800	3260	1150	852	5870	10400	1650	706	651	268	430
30	2070	3320	2860	1100	---	8000	8220	1650	1240	734	260	450
31	1730	---	2620	1050	---	10000	---	1770	---	598	302	---
TOTAL	136890	86910	70350	57640	26474	159402	166460	108240	41009	21574	14057	11905
MEAN	4416	2897	2269	1859	913	5142	5549	3492	1367	696	453	397
MAX	12400	9920	6800	5920	1650	21700	13000	8580	1980	1140	1030	1150
MIN	1420	1350	1250	1050	651	572	2020	1610	651	450	260	220
≠	251	236	250	251	251	248	248	249	271	305	294	265
MEAN‡	4666	3133	2520	2110	1164	5390	5796	3741	1638	1001	747	662
CFSM‡	2.47	1.66	1.33	1.11	.61	2.85	3.06	1.98	.87	.53	.39	.35
IN.‡	2.84	1.85	1.53	1.29	.66	3.28	3.42	2.28	.97	.61	.46	.39

CAL YR 1979 TOTAL 1405602 MEAN 3851 MAX 62100 MIN 445 MEAN‡ 4109 CFSM‡ 2.17 IN.‡ 29.47
WTR YR 1980 TOTAL 900911 MEAN 2462 MAX 21700 MIN 220 MEAN‡ 2721 CFSM‡ 1.44 IN.‡ 19.57

≠ Diversion, equivalent in cubic feet per second, for municipal water supply, furnished by City of Philadelphia.
‡ Adjusted for diversion.

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1945 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1963 to current year.
pH: January 1968 to current year.
WATER TEMPERATURES: October 1945 to current year.
DISSOLVED OXYGEN: January 1966 to current year.

REMARKS.--Water-quality recorder located at Belmont raw-water pumping station on west side of river near Columbia Bridge.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 972 micromhos June 25, 1965; minimum, 92 micromhos Feb. 26, 1979.
pH: Maximum, 10.1 Aug. 12, 1969; minimum, 5.7 Dec. 21, 1973.
WATER TEMPERATURES: Maximum, 32.0°C Aug. 5 and 10, 1980; minimum, freezing point on many days during winter months.
DISSOLVED OXYGEN: Maximum, 18.3 mg/L Jan. 11, 1978; minimum, 0.4 mg/L July 24, 1971.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 571 micromhos Sept. 3; minimum, 158 micromhos Nov. 27.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT 29...	1200	1940	341	7.3	12.0	1.0	8.5	350	--	130	65	34
NOV 28...	1000	5200	238	7.1	13.0	7.0	10.0	5900	9100	100	50	26
DEC 26...	1230	7220	290	7.2	7.5	1.0	11.8	--	--	110	60	27
JAN 31...	0830	1050	303	7.7	3.0	1.2	12.8	--	--	140	67	35
FEB 21...	0930	822	482	7.5	4.0	--	--	--	--	160	78	39
27...	1400	1140	420	7.4	4.5	3.0	12.1	11000	--	150	86	38
MAR 12...	1300	1460	372	7.7	8.5	.35	10.8	2000	44	130	68	33
APR 22...	1300	2810	285	7.6	16.5	1.0	10.2	3000	140	110	62	28
MAY 14...	1300	6450	210	7.1	18.5	110	8.8	13000	6300	80	38	20
JUN 10...	0930	1690	364	8.0	22.0	.40	7.2	1300	260	120	58	30
JUL 16...	1200	470	412	8.8	27.5	1.4	9.2	3100	24	170	80	42
AUG 14...	1000	450	465	7.8	28.0	1.3	6.3	1200	580	190	87	45
SEP 25...	1200	448	510	7.5	22.5	1.5	6.0	11000	320	200	110	46

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	SODIUM+ POTAS-SIUM DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	POTAS-SIUM 40 DIS-SOLVED (PCI/L AS K40)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT 29...	11	16	--	.6	--	--	--	65	57	23	.2	8.8
NOV 28...	8.7	11	26	.5	14	3.4	2.5	51	41	14	.1	10
DEC 26...	9.9	13	28	.5	16	3.1	2.3	48	46	19	.2	8.7
JAN 31...	13	22	25	.8	25	2.5	1.9	74	59	32	.2	9.1
FEB 21...	14	25	26	.9	28	3.1	--	77	81	34	.2	7.7
27...	14	25	26	.9	28	3.0	2.2	67	76	34	.3	7.3
MAR 12...	12	24	28	.9	27	2.8	2.1	64	64	32	.2	6.7
APR 22...	9.4	12	19	.5	--	2.5	1.9	47	47	17	.1	7.3
MAY 14...	7.3	11	22	.5	--	2.1	1.6	42	36	13	.1	7.6
JUN 10...	12	25	30	1.0	--	2.8	2.1	66	65	26	.2	7.2
JUL 16...	16	23	22	.8	--	3.8	2.8	91	81	32	.3	3.4
AUG 14...	18	30	25	1.0	--	4.3	3.2	100	88	38	.3	7.0
SEP 25...	20	36	28	1.1	--	5.2	3.9	91	92	47	.4	5.8

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS NH4)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)
OCT 29...	218	201	.30	1140	2.6	2.6	.080	.060	.10	.08	--	1.2
NOV 28...	167	154	.23	2350	2.3	2.1	--	.020	--	.03	--	.84
DEC 26...	185	169	.25	3610	3.2	2.9	.010	.010	.01	.01	.76	.64
JAN 31...	241	228	.33	683	2.7	2.5	.760	.720	.92	.93	.84	.28
FEB 21...	271	262	.37	601	--	2.7	--	--	--	--	--	--
27...	260	251	.35	800	3.0	2.9	.770	.700	.93	.90	--	.80
MAR 12...	248	226	.34	978	2.5	2.6	--	.560	--	.72	--	1.1
APR 22...	182	162	.25	1380	2.4	2.4	.010	.020	.01	.03	.46	.35
MAY 14...	154	132	.21	2680	2.2	2.1	.040	.030	.05	.04	1.8	.73
JUN 10...	267	220	.36	1220	2.4	2.6	.070	.060	.08	.08	1.2	1.0
JUL 16...	277	265	.38	352	2.0	2.0	.000	.000	.00	.00	--	.67
AUG 14...	332	298	.45	403	--	1.6	--	.040	--	.05	--	.48
SEP 25...	335	318	.46	405	2.4	2.3	.190	.110	.23	.14	.79	.80

DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 29...	--	--	1.3	--	3.9	--	.080	.25	.020	--	2.4
NOV 28...	--	--	.86	--	3.0	--	.170	.52	.180	0	6.9
DEC 26...	.77	.12	.65	4.0	3.6	18	.290	.89	.190	0	--
JAN 31...	1.6	.60	1.0	4.3	3.5	19	.280	.86	.230	--	--
FEB 21...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	1.5	--	4.4	--	.260	.80	.190	0	4.4
MAR 12...	--	--	1.7	--	4.3	--	.170	.52	.160	0	--
APR 22...	.47	.10	.37	2.9	2.8	13	.090	.28	.070	--	--
MAY 14...	1.8	1.0	.76	4.0	2.9	18	.670	2.1	.040	1	34
JUN 10...	1.3	.20	1.1	3.7	3.7	16	.250	.77	.180	0	--
JUL 16...	--	--	.67	--	2.7	--	.370	1.1	.300	--	5.7
AUG 14...	--	--	.52	--	2.1	--	.620	1.9	.410	0	5.6
SEP 25...	.98	.07	.91	3.4	3.2	15	.700	2.1	.450	1	--

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)
DEC 26...	1230	1	0	1	--	--	50	0	0	0	30	20
MAR 12...	1300	1	0	1	--	--	50	--	--	--	10	0
JUN 10...	0930	1	0	1	--	--	60	0	0	0	20	--
SEP 25...	1200	2	0	2	100	0	100	1	0	1	20	0

DATE	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
DEC 26...	<10	2	2	0	13	7	6	1400	1100	290	12
MAR 12...	10	--	--	4	8	1	7	--	--	240	--
JUN 10...	<10	2	2	0	9	3	6	920	880	40	9
SEP 25...	20	3	3	0	--	--	20	--	--	50	20

DATE	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)
DEC 26...	12	0	210	50	160	.1	.0	.1	9	4	5
MAR 12...	--	--	350	0	350	.1	.0	<.1	13	0	13
JUN 10...	9	0	250	150	100	.2	.0	.2	8	4	4
SEP 25...	20	0	560	380	180	.2	.1	.1	19	11	8

DATE	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)
DEC 26...	0	0	0	0	0	0	70	40	30	--	--
MAR 12...	0	0	0	0	0	0	130	20	110	4.5	.1
JUN 10...	0	0	0	0	0	0	--	--	4	4.0	1.5
SEP 25...	0	0	0	1	1	0	290	280	10	5.7	.5

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ANTI-MONY, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BERYL-LIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)
NOV 13...	1630	0	0	2	<10	40	80	170	.00	40

DATE	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	SILVER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS AG)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
NOV 13...	0	<1	650	25	1.9	27	90	.0	30	5.8

DATE	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
NOV 13...	3.9	2.1	2.0	.0	.0	.0	.0	.0	0

BEGIN DATE	END DATE	BIOMASS CHLORO-PHYLL RATIO PERI-PHYTON (UNITS)	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M
FEB 27	MAR 12...	160	.500	.000	.550	.470
MAY 14	JUN 02...	372	4.46	1.41	5.91	4.25
AUG 14	SEP 03...	238	20.6	3.05	19.5	14.6

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE	MAR 12,80	MAY 14,80	JUN 10,80	JUL 16,80	AUG 14,80	SEP 25,80
TIME	1300	1300	0930	1200	0000	1200
TOTAL CELLS/ML	4400	1900	18000	48000	43000	72000
DIVERSITY: DIVISION	0.6	1.4	1.0	1.1	1.5	1.1
.CLASS	0.6	1.4	1.0	1.1	1.5	1.1
..ORDER	1.6	2.1	1.7	1.4	1.6	1.6
...FAMILY	2.2	3.2	1.8	2.2	2.2	2.2
....GENUS	2.8	3.5	2.1	2.8	2.6	2.8

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...COELASTRACEAE												
....COELASTRUM	--	-	--	-	--	-	12000#	25	--	-	2500	3
...HYDRODICTYACEAE												
....PEDIASTRUM	--	-	--	-	--	-	--	-	1400	3	--	-
...MICRACTINIACEAE												
....GOLENKINIA	--	-	--	-	--	-	--	-	--	-	*	0
....MICRACTINIUM	--	-	--	-	--	-	--	-	850	2	2500	3
...OOCYSTACEAE												
....ANKISTRODESMUS	--	-	210	11	280	2	*	0	510	1	--	-
....CHODATELLA	--	-	--	-	140	1	--	-	--	-	--	-
....DICTYOSPHAERIUM	--	-	--	-	--	-	800	2	510	1	1900	3
....KIRCHNERIELLA	--	-	--	-	--	-	--	-	--	-	620	1
....OOCYSTIS	--	-	15	1	--	-	*	0	--	-	--	-
....SELENASTRUM	--	-	--	-	140	1	*	0	1400	3	--	-
....WESTELLA	--	-	--	-	--	-	--	-	680	2	--	-
...SCENEDESMACEAE												
....ACTINASTRUM	--	-	--	-	--	-	11000#	24	2700	6	--	-
....CRUCIGENIA	--	-	--	-	--	-	--	-	--	-	11000#	16
....SCENEDESMUS	--	-	270	14	2800#	16	5200	11	14000#	33	28000#	39
....TETRASTRUM	--	-	--	-	570	3	800	2	--	-	--	-
..TETRASPORALES												
...COCCOMYXACEAE												
....ELAKATOTHRIX	--	-	--	-	--	-	--	-	--	-	2500	3
..VOLVOCALES												
...CHLAMYDOMONADACEAE												
....CHLAMYDOMONAS	200	4	60	3	8800#	48	1200	3	*	0	3400	5
...PHACOTACEAE												
....PTEROMONAS	--	-	30	2	--	-	--	-	--	-	--	-
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..CENTRALES												
...COSCINODISCACEAE												
....CYCLOTELLA	510	12	360#	19	4400#	24	11000#	24	5300	12	12000#	16
....MELOSIRA	200	4	45	2	280	2	800	2	--	-	--	-
....STEPHANODISCUS	1600#	36	30	2	--	-	--	-	--	-	--	-
..PENNALES												
...ACHNANTHACEAE												
....ACHNANTHES	120	3	30	2	--	-	--	-	--	-	--	-
....RHOICOSPHENIA	--	-	45	2	--	-	--	-	--	-	*	0
...CYMBELLACEAE												
....CYMBELLA	39	1	15	1	--	-	--	-	--	-	--	-
...EUNOTIACEAE												
....EUNOTIA	--	-	15	1	--	-	--	-	--	-	--	-
...FRAGILARIACEAE												
....ASTERIONELLA	160	4	45	2	--	-	--	-	--	-	--	-
....SYNEDRA	--	-	30	2	--	-	--	-	--	-	--	-
...GOMPHONEMATACEAE												
....GOMPHONEMA	--	-	15	1	--	-	--	-	--	-	--	-
...NAVICULACEAE												
....NAVICULA	510	12	180	10	--	-	--	-	*	0	--	-
...NITZSCHIACEAE												
....NITZSCHIA	830#	19	240	13	--	-	1400	3	850	2	940	1
...SURIRELLACEAE												
....SURIRELLA	--	-	15	1	--	-	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)												
.CRYPTOPHYCEAE												
..CRYPTOMONADALES												
...CRYPTOMONADACEAE												
....CRYPTOMONAS	--	-	--	-	--	-	400	1	680	2	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....ANACYSTIS	79	2	--	-	710	4	1800	4	14000#	32	5600	8
..HORMOGONALES												
...OSCILLATORIACEAE												
....OSCILLATORIA	160	4	240	13	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)												
.EUGLENOPHYCEAE												
..EUGLENALES												
...EUGLENACEAE												
....EUGLENA	39	1	--	-	--	-	--	-	--	-	--	-
....TRACHELOMONAS	--	-	--	-	--	-	--	-	--	-	*	0

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	265	211	231	337	330	333	255	245	248	283	273	279
2	249	196	214	344	322	335	267	255	263	287	276	280
3	211	178	198	332	301	319	279	267	273	286	276	281
4	215	202	209	297	249	261	280	269	274	318	282	293
5	214	192	205	285	260	271	281	274	278	338	304	316
6	217	200	206	302	274	288	287	280	283	329	316	321
7	206	201	203	301	276	292	300	287	293	330	318	323
8	208	201	204	278	272	275	302	297	300	345	327	336
9	224	207	213	279	272	274	302	295	298	350	340	344
10	220	215	218	284	276	280	305	298	301	356	340	349
11	223	218	220	283	275	279	306	299	302	405	356	366
12	247	203	224	281	268	274	317	305	311	409	317	373
13	249	235	243	271	253	261	317	309	312	315	299	306
14	254	247	251	287	253	272	321	312	316	333	300	319
15	260	250	253	305	286	295	328	317	322	355	333	345
16	266	259	263	316	305	310	329	308	319	351	342	346
17	272	266	270	317	309	313	326	307	319	360	344	349
18	288	271	279	316	303	310	334	325	331	362	354	358
19	295	281	287	319	307	313	361	332	339	358	348	352
20	312	290	298	319	314	317	366	347	356	351	327	337
21	313	300	308	324	317	320	366	352	357	329	321	326
22	316	309	312	322	314	318	378	366	371	338	320	331
23	339	315	320	326	312	318	380	370	375	371	338	352
24	---	---	---	333	323	327	388	367	376	361	343	354
25	---	---	---	345	331	336	388	336	366	373	353	361
26	320	308	314	345	201	309	334	257	291	389	362	374
27	338	320	326	192	158	171	305	257	289	393	381	387
28	---	---	---	268	193	239	286	254	272	401	381	390
29	368	324	342	268	260	265	253	249	251	---	---	---
30	339	317	330	260	244	249	265	253	258	---	---	---
31	337	330	333	---	---	---	286	264	272	---	---	---
MONTH	368	178	260	345	158	291	388	245	307	409	273	337

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	---	---	---	418	404	408	228	190	196	231	228	230
2	---	---	---	422	408	414	207	188	196	232	229	231
3	---	---	---	452	419	433	236	208	223	235	231	232
4	449	420	---	426	419	422	233	225	229	257	235	248
5	432	423	427	469	427	454	225	210	214	251	242	246
6	---	---	---	468	455	462	232	212	224	255	250	253
7	---	---	---	459	446	452	249	231	240	261	251	257
8	---	---	---	446	428	436	250	246	248	268	257	263
9	---	---	---	434	415	422	263	233	246	276	266	272
10	---	---	---	451	423	443	237	225	230	278	266	274
11	---	---	---	416	388	403	244	224	230	288	272	280
12	---	---	---	406	362	379	248	228	235	289	281	285
13	---	---	---	503	344	375	233	228	231	289	237	274
14	---	---	---	423	388	402	255	231	244	237	204	220
15	---	---	---	387	362	378	258	243	250	265	237	257
16	474	467	470	363	345	354	254	245	248	256	247	251
17	474	471	473	349	334	345	263	247	253	254	244	247
18	473	470	472	328	222	263	269	258	265	256	246	251
19	482	471	477	282	238	267	281	253	269	271	253	265
20	483	477	481	268	247	257	281	276	279	284	262	271
21	485	476	---	255	194	244	---	---	---	287	264	276
22	---	---	---	207	164	183	---	---	---	303	277	289
23	---	---	---	201	183	191	266	255	261	284	277	281
24	---	---	---	206	190	198	274	262	268	307	275	294
25	426	407	---	206	196	201	291	272	282	287	266	277
26	434	423	429	206	194	198	299	284	291	298	266	280
27	431	412	422	220	206	213	313	293	299	294	265	281
28	431	405	414	232	221	226	317	304	311	287	260	273
29	410	402	406	237	229	234	311	211	252	298	261	278
30	---	---	---	234	217	224	234	211	229	304	277	292
31	---	---	---	229	200	216	---	---	---	318	285	304
MONTH	485	402	447	503	164	326	317	188	248	318	204	266

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	326	293	312	442	408	427	401	385	393	545	463	513
2	377	301	341	445	434	439	394	384	390	549	471	513
3	361	342	350	439	433	436	401	388	395	571	459	512
4	362	331	343	438	404	423	456	391	428	535	442	497
5	358	338	349	413	389	399	448	424	437	540	462	519
6	389	353	375	402	384	393	435	305	350	549	509	532
7	389	371	385	414	391	406	397	336	374	553	508	537
8	385	372	378	429	400	417	453	382	418	563	519	550
9	389	371	381	442	427	436	456	439	448	568	553	563
10	387	352	364	448	437	444	455	421	439	570	559	565
11	360	347	354	448	434	440	432	409	423	567	542	554
12	359	345	353	438	418	430	464	416	441	547	493	519
13	352	345	348	432	405	422	465	443	451	504	479	495
14	357	348	352	434	415	425	468	434	454	503	489	496
15	367	358	363	434	421	430	446	436	440	517	493	504
16	375	364	368	446	391	419	464	438	454	559	510	532
17	374	366	371	401	357	376	478	458	468	560	550	555
18	376	367	372	424	391	410	509	463	491	556	383	440
19	384	362	376	434	411	424	517	498	511	525	426	507
20	378	370	374	426	405	414	509	471	496	538	524	530
21	373	350	361	411	400	405	495	433	479	540	531	535
22	374	355	362	422	404	416	508	418	478	534	508	522
23	404	371	384	417	371	395	526	438	491	511	492	505
24	406	388	396	406	371	395	538	452	505	524	510	514
25	421	405	410	402	391	397	536	464	512	529	493	511
26	426	414	420	416	376	398	533	466	509	508	458	485
27	429	409	419	404	371	389	---	---	---	469	415	436
28	418	402	409	405	384	395	---	---	---	430	406	416
29	413	396	405	413	391	402	538	499	---	488	422	455
30	418	391	405	414	389	402	---	---	---	531	467	497
31	---	---	---	401	387	395	---	---	---	---	---	---
MONTH	429	293	373	448	357	413	538	305	449	571	383	510

PH (UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	7.0	6.9	6.9	7.3	7.2	7.2	7.1	7.1	7.1	7.3	7.2	7.2
2	7.0	6.7	6.8	7.4	7.2	7.3	7.2	7.1	7.1	7.3	7.1	7.2
3	6.8	6.7	6.7	7.3	7.1	7.2	7.2	7.1	7.1	7.3	7.2	7.3
4	6.8	6.5	6.7	7.2	7.0	7.0	7.2	7.1	7.1	7.3	7.2	7.3
5	6.9	6.8	6.8	7.2	7.0	7.1	7.2	7.1	7.2	7.3	7.2	7.3
6	6.8	6.8	6.8	7.1	7.0	7.1	7.2	7.2	7.2	7.3	7.2	7.3
7	6.8	6.7	6.8	7.1	7.0	7.0	7.3	7.2	7.2	7.3	7.2	7.2
8	6.8	6.6	6.7	7.1	7.0	7.1	7.3	7.2	7.2	7.3	7.2	7.2
9	7.0	6.6	6.7	7.1	7.0	7.1	7.2	7.2	7.2	7.2	7.1	7.2
10	6.9	6.7	6.7	7.1	7.1	7.1	7.3	7.1	7.2	7.3	7.1	7.2
11	6.7	6.7	6.7	7.2	7.1	7.1	7.2	7.1	7.2	7.3	7.2	7.3
12	6.9	6.7	6.8	7.2	7.1	7.1	7.2	7.1	7.2	7.4	7.1	7.3
13	7.1	6.9	7.0	7.1	7.1	7.1	7.2	7.1	7.2	7.1	7.0	7.1
14	7.1	7.0	7.1	7.2	7.1	7.2	7.3	7.1	7.2	7.2	7.0	7.1
15	7.1	7.1	7.1	7.2	7.1	7.2	7.2	7.1	7.2	7.3	7.1	7.2
16	7.1	7.1	7.1	7.2	7.2	7.2	7.1	7.1	7.1	7.3	7.2	7.2
17	7.1	7.1	7.1	7.3	7.2	7.2	7.3	7.1	7.2	7.3	7.2	7.3
18	7.1	7.1	7.1	7.2	7.1	7.1	7.3	7.1	7.2	7.3	7.2	7.3
19	7.1	7.1	7.1	7.2	7.1	7.1	7.2	7.1	7.2	7.3	7.2	7.3
20	7.1	7.1	7.1	7.2	7.1	7.1	7.3	7.2	7.2	7.2	7.2	7.2
21	7.1	7.1	7.1	7.2	7.1	7.1	7.2	7.1	7.2	7.2	7.1	7.2
22	7.2	7.0	7.1	7.2	7.1	7.1	7.2	7.1	7.2	7.3	7.2	7.2
23	7.2	7.1	7.1	7.3	7.1	7.2	7.2	7.1	7.2	7.3	7.1	7.2
24	---	---	---	7.3	7.2	7.2	7.2	7.1	7.2	7.2	7.1	7.1
25	---	---	---	7.3	7.2	7.2	7.3	7.1	7.2	7.2	7.1	7.1
26	7.3	7.2	7.2	7.3	7.0	7.2	7.2	7.1	7.1	7.2	7.0	7.1
27	7.4	7.2	7.3	6.9	6.7	6.8	7.2	7.0	7.1	7.2	7.0	7.1
28	---	---	---	7.1	6.9	7.0	7.2	7.1	7.1	7.1	7.0	7.1
29	7.3	7.2	7.3	7.1	7.0	7.1	7.3	7.1	7.2	---	---	---
30	7.4	7.2	7.3	7.1	7.0	7.1	7.3	7.2	7.2	---	---	---
31	7.3	7.2	7.3	---	---	---	7.3	7.2	7.2	---	---	---
MONTH	7.4	6.5	7.0	7.4	6.7	7.1	7.3	7.0	7.2	7.4	7.0	7.2

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued

PH (UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	---	---	---	---	---	---	7.7	7.6	7.7	7.0	6.2	6.9
2	---	---	---	---	---	---	7.7	7.6	7.7	7.0	6.9	7.0
3	---	---	---	---	---	---	7.7	7.2	7.5	7.0	6.9	7.0
4	7.1	7.0	---	---	---	---	7.4	7.3	7.4	7.5	7.0	7.4
5	7.0	6.9	7.0	---	---	---	7.4	7.3	7.3	7.4	7.3	7.4
6	---	---	---	---	---	---	7.4	7.3	7.4	7.4	7.3	7.3
7	---	---	---	---	---	---	7.5	7.4	7.5	7.4	7.3	7.4
8	---	---	---	7.9	7.8	---	7.5	7.4	7.5	7.5	7.3	7.4
9	---	---	---	8.0	7.8	7.9	7.5	7.4	7.5	7.5	7.2	7.3
10	---	---	---	8.1	7.8	7.9	7.4	7.3	7.3	7.5	7.3	7.4
11	---	---	---	7.9	7.7	7.8	7.3	7.2	7.3	7.4	7.3	7.4
12	---	---	---	7.8	7.7	7.7	7.4	7.2	7.3	7.4	7.3	7.3
13	---	---	---	7.7	7.6	7.7	7.4	7.2	7.3	7.4	7.2	7.3
14	---	---	---	7.9	7.6	7.7	7.4	7.3	7.3	7.2	7.1	7.1
15	---	---	---	7.7	7.6	7.7	7.4	7.3	7.3	7.3	7.2	7.2
16	---	---	---	7.8	7.7	7.8	7.3	7.3	7.3	7.3	7.2	7.3
17	---	---	---	7.8	7.7	7.8	7.3	7.2	7.3	7.4	7.2	7.3
18	---	---	---	7.8	7.5	7.7	7.3	7.2	7.3	7.3	7.2	7.3
19	---	---	---	7.6	7.4	7.5	7.3	7.1	7.2	7.4	7.2	7.3
20	---	---	---	7.6	7.5	7.6	7.2	7.1	7.2	7.3	7.2	7.3
21	---	---	---	7.8	7.4	7.6	---	---	---	7.3	7.2	7.3
22	---	---	---	7.5	7.3	7.4	---	---	---	7.3	7.2	7.3
23	---	---	---	7.5	7.3	7.4	7.9	7.5	7.6	7.3	7.2	7.3
24	---	---	---	7.6	7.4	7.5	7.7	7.4	7.5	7.4	7.1	7.3
25	---	---	---	7.6	7.5	7.6	7.5	7.3	7.4	7.5	7.2	7.4
26	---	---	---	7.5	7.5	7.5	7.4	7.3	7.4	7.5	7.3	7.4
27	---	---	---	7.6	7.4	7.5	7.4	7.3	7.4	7.6	7.4	7.5
28	---	---	---	7.7	7.6	7.6	7.4	7.3	7.4	8.2	7.4	7.7
29	---	---	---	7.9	7.6	7.7	7.3	7.1	7.2	7.7	7.3	7.5
30	---	---	---	7.9	7.8	7.8	7.2	6.9	7.1	7.7	7.3	7.5
31	---	---	---	7.8	7.6	7.8	---	---	---	7.5	7.3	7.4
MONTH	7.1	6.9	7.0	8.1	7.3	7.7	7.9	6.9	7.4	8.2	6.2	7.3

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	8.1	7.2	7.6	9.0	8.3	8.7	8.5	7.7	8.0	8.5	7.8	8.1
2	7.8	7.3	7.6	8.7	8.2	8.5	---	---	---	8.5	7.9	8.2
3	7.8	7.4	7.6	8.3	7.6	7.9	---	---	---	8.7	7.9	8.3
4	8.1	7.4	7.7	8.2	7.3	7.6	8.6	8.4	---	---	---	---
5	8.3	7.7	8.0	8.0	7.5	7.7	8.8	8.0	8.4	---	---	---
6	---	---	---	7.6	7.2	7.4	8.2	7.0	7.3	---	---	---
7	---	---	---	7.8	7.3	7.5	8.4	7.2	7.8	---	---	---
8	---	---	---	8.4	7.3	7.9	8.7	7.5	8.2	---	---	---
9	---	---	---	8.6	7.5	8.2	8.7	8.4	8.6	---	---	---
10	---	---	---	8.4	7.5	8.0	8.7	8.0	8.3	---	---	---
11	---	---	---	8.4	7.3	7.8	8.2	7.4	7.8	---	---	---
12	---	---	---	8.2	7.5	7.9	7.9	7.1	7.5	---	---	---
13	---	---	---	---	---	---	8.4	7.5	7.9	---	---	---
14	---	---	---	9.0	8.7	---	8.5	7.5	8.0	---	---	---
15	---	---	---	8.9	8.5	8.7	8.2	7.6	7.8	---	---	---
16	---	---	---	9.0	8.5	8.8	7.8	7.2	7.5	7.8	7.5	---
17	8.9	8.5	8.7	8.6	7.6	8.0	8.0	7.2	7.5	7.5	7.4	7.4
18	8.6	8.0	8.4	8.4	7.5	7.9	7.8	7.3	7.6	7.4	7.2	7.2
19	9.1	7.6	8.4	---	---	---	7.8	7.4	7.6	8.3	7.2	7.7
20	9.1	8.5	8.7	---	---	---	8.1	7.4	7.8	8.0	7.6	7.8
21	9.5	8.7	9.1	9.0	8.4	8.7	8.2	7.5	7.8	8.0	7.4	7.7
22	9.5	9.0	9.3	9.0	8.6	8.8	7.8	7.5	7.6	7.7	7.4	7.5
23	9.7	8.9	9.3	8.7	8.1	8.4	7.8	7.4	7.6	8.3	7.5	7.8
24	9.5	9.2	9.3	8.5	7.5	8.0	8.1	7.3	7.6	8.0	7.4	7.6
25	9.5	9.0	9.3	8.7	7.5	8.1	8.8	7.4	8.0	7.7	7.4	7.5
26	9.4	9.0	9.2	8.8	7.6	8.4	8.6	8.1	8.4	7.5	7.4	7.5
27	9.2	8.8	9.0	8.7	7.9	8.4	8.5	8.2	---	7.7	7.5	7.6
28	9.2	8.8	9.0	9.1	7.9	8.5	8.9	8.3	8.6	7.6	7.5	7.5
29	9.0	8.5	8.8	9.0	7.9	8.4	8.7	7.8	8.3	7.7	7.4	7.6
30	---	---	---	8.7	7.6	8.2	8.6	7.9	8.3	7.6	7.3	7.5
31	---	---	---	8.5	8.0	8.3	8.1	7.6	7.8	---	---	---
MONTH	9.7	7.2	8.6	9.1	7.2	8.2	8.9	7.0	7.9	8.7	7.2	7.7

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	---	---	---	13.0	11.5	12.0	8.0	7.0	7.5	5.0	4.5	5.0
2	---	---	---	14.0	12.0	13.0	7.0	6.0	6.5	5.0	4.5	5.0
3	---	---	---	14.0	14.0	14.0	6.5	5.0	5.5	4.5	4.0	4.5
4	---	---	---	14.0	12.0	13.0	6.0	4.5	5.0	4.5	3.5	4.0
5	---	---	---	12.0	11.0	11.5	6.5	5.0	5.5	3.5	3.5	3.5
6	---	---	---	11.0	10.5	11.0	6.5	5.5	6.0	4.0	3.0	3.0
7	---	---	---	11.0	10.5	10.5	7.5	6.5	7.0	3.0	2.5	3.0
8	---	---	---	11.0	10.0	10.5	8.0	6.5	7.0	4.0	3.0	3.5
9	---	---	---	11.5	10.5	11.0	7.0	6.5	6.5	3.5	3.0	3.5
10	---	---	---	12.5	11.5	12.0	7.0	6.0	6.5	3.5	2.5	3.0
11	---	---	---	13.0	12.5	12.5	7.5	6.0	6.5	5.5	3.0	4.0
12	12.5	12.5	12.5	13.0	12.5	12.5	8.0	6.5	7.0	6.0	4.0	5.0
13	13.0	12.5	12.5	12.0	11.5	11.5	8.0	7.5	8.0	4.0	3.5	3.5
14	13.0	12.0	12.5	11.5	10.5	11.5	8.0	7.5	8.0	4.5	3.5	4.0
15	13.0	12.0	12.5	11.0	10.0	10.5	7.5	6.5	7.5	6.0	4.5	5.0
16	13.0	12.0	12.5	10.5	9.5	10.0	7.0	6.5	6.5	6.5	5.0	5.5
17	13.5	12.5	13.0	10.0	9.0	9.5	6.5	4.5	6.0	7.0	6.0	6.5
18	14.5	13.0	14.0	10.5	9.0	9.5	4.5	3.5	4.0	6.5	6.5	6.5
19	15.5	13.5	14.5	10.5	9.5	10.0	3.5	2.5	3.0	7.0	6.5	6.5
20	16.5	15.0	15.5	10.5	10.0	10.0	3.0	2.5	2.5	6.5	5.5	6.5
21	18.0	16.0	17.0	11.0	9.5	10.5	2.5	2.0	2.5	6.0	5.0	5.5
22	18.5	17.0	18.0	11.5	10.5	11.0	3.5	2.5	3.0	5.0	5.0	5.0
23	19.5	18.0	18.5	12.0	11.0	11.5	4.5	3.5	4.0	5.5	5.0	5.0
24	---	---	---	13.0	11.5	12.5	5.5	4.5	5.0	4.5	3.5	4.0
25	---	---	---	13.5	12.0	13.0	7.0	5.5	6.5	3.5	3.5	3.5
26	14.0	13.0	14.0	16.0	13.5	14.5	7.5	7.0	7.5	4.0	2.5	3.5
27	13.5	12.5	12.5	16.0	13.5	15.0	7.5	6.5	7.0	4.0	3.0	3.5
28	---	---	---	13.5	12.5	13.0	6.5	5.5	6.0	3.5	3.0	3.5
29	12.5	11.5	12.0	12.5	9.5	11.0	6.0	5.5	5.5	---	---	---
30	12.5	11.0	12.0	9.5	8.0	9.0	6.0	5.5	5.5	---	---	---
31	12.5	11.0	11.5	---	---	---	6.0	5.0	5.5	---	---	---
MONTH	19.5	11.0	14.0	16.0	8.0	11.5	8.0	2.0	6.0	7.0	2.5	4.5

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	---	---	---	3.0	2.0	3.0	8.0	7.5	8.0	19.0	17.5	18.5
2	---	---	---	2.0	1.5	2.0	10.0	8.0	9.5	20.0	19.5	19.5
3	---	---	---	2.5	1.5	2.0	11.5	9.5	11.0	20.5	20.0	20.5
4	2.5	1.5	---	3.5	1.5	2.5	12.0	11.0	11.5	20.5	16.5	17.5
5	3.5	2.5	3.0	4.5	3.0	4.0	11.5	10.5	11.0	19.5	17.5	18.0
6	---	---	---	6.5	4.5	5.5	12.5	10.5	11.5	20.0	18.0	19.0
7	---	---	---	6.5	5.5	6.0	13.5	11.5	12.5	21.0	19.5	20.0
8	---	---	---	8.0	6.5	7.0	14.5	12.5	13.5	20.5	19.0	20.0
9	---	---	---	9.5	7.5	8.5	14.5	13.5	14.0	19.0	17.5	18.5
10	---	---	---	11.0	8.5	9.5	14.5	13.5	14.0	18.5	17.0	17.5
11	---	---	---	10.0	8.5	9.5	15.0	13.5	14.0	18.0	17.0	17.5
12	---	---	---	9.0	7.5	8.0	15.0	13.5	14.5	18.0	17.0	17.5
13	---	---	---	7.5	5.5	6.5	15.5	14.0	14.5	18.5	17.5	18.0
14	---	---	---	6.0	4.5	5.5	15.0	14.0	14.5	19.5	18.0	18.5
15	---	---	---	5.5	4.0	4.5	14.5	13.5	14.0	19.5	18.0	18.5
16	5.0	4.5	4.5	6.0	3.5	5.0	13.5	11.5	13.0	20.0	18.0	19.0
17	5.5	4.5	5.0	7.5	5.5	6.0	12.5	10.5	11.5	20.0	18.5	19.0
18	5.5	5.5	5.5	7.5	6.5	7.0	13.0	11.0	12.0	18.5	18.5	18.5
19	5.5	5.5	5.5	8.0	6.5	7.5	14.5	12.5	13.5	19.5	18.5	19.0
20	---	---	---	8.0	6.5	7.5	14.5	14.0	14.0	19.5	18.5	19.0
21	---	---	---	9.5	7.5	8.5	---	---	---	19.0	18.5	19.0
22	---	---	---	9.5	7.0	8.0	---	---	---	20.0	18.5	19.0
23	---	---	---	7.5	6.5	7.0	17.5	16.0	16.5	21.0	19.5	20.5
24	---	---	---	7.5	6.5	7.0	18.0	16.0	17.0	22.5	20.5	21.5
25	7.0	6.0	---	8.0	7.5	7.5	18.5	17.0	17.5	24.0	22.0	23.0
26	6.5	5.5	6.0	8.0	7.0	7.5	17.5	17.0	17.5	23.5	21.5	22.5
27	5.5	4.5	5.0	8.5	7.0	8.0	17.0	16.0	16.5	22.5	21.0	21.5
28	5.0	4.5	4.5	9.0	8.0	8.5	16.0	14.0	15.0	22.5	20.5	21.5
29	4.5	3.0	4.0	9.5	8.5	9.0	17.0	12.0	14.5	22.5	20.5	21.5
30	---	---	---	9.5	9.5	9.5	17.5	12.5	14.5	22.5	21.0	22.0
31	---	---	---	9.5	8.0	9.0	---	---	---	22.5	21.0	22.0
MONTH	7.0	1.5	5.0	11.0	1.5	6.5	18.5	7.5	13.5	24.0	16.5	19.5

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY		JUNE			JULY			AUGUST			SEPTEMBER	
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	24.0	21.5	23.0	28.5	26.0	27.5	30.0	28.0	29.0	29.0	27.5	28.5
2	24.5	23.0	24.0	28.0	26.5	27.5	30.0	28.5	29.5	30.0	28.0	29.0
3	25.0	23.5	24.0	27.5	27.0	27.5	31.0	29.0	30.0	30.0	28.5	29.0
4	25.0	23.0	24.0	28.5	26.5	27.5	31.0	29.0	30.0	30.0	27.5	28.5
5	24.5	22.5	23.5	28.0	26.5	27.5	32.0	30.0	31.0	28.5	27.5	28.0
6	---	---	---	27.5	26.5	27.0	30.5	27.5	29.0	29.5	27.5	28.0
7	---	---	---	27.5	25.5	26.5	31.0	28.5	29.5	28.5	27.0	27.5
8	---	---	---	26.5	25.5	26.0	31.0	29.5	30.5	28.0	26.5	27.0
9	---	---	---	27.5	25.0	26.0	31.5	30.0	30.5	27.0	25.5	26.5
10	22.5	21.5	22.0	28.0	26.0	27.0	32.0	29.5	30.5	27.0	25.5	26.0
11	22.5	20.5	21.5	28.0	26.0	27.0	31.0	29.5	30.5	26.0	25.0	25.5
12	23.0	20.5	22.0	28.5	27.0	27.5	30.5	29.0	29.5	27.0	24.5	25.5
13	23.5	21.5	22.5	28.0	26.0	27.0	30.0	28.0	29.0	26.5	25.0	26.0
14	24.5	22.5	23.0	28.5	26.0	27.5	29.0	28.0	28.5	26.0	25.5	25.5
15	25.0	23.5	24.5	28.5	27.0	28.0	29.0	28.0	28.5	25.5	24.5	25.0
16	25.5	24.0	24.5	29.0	27.5	28.0	28.5	27.0	28.0	26.5	23.0	23.5
17	24.5	23.5	24.0	28.5	28.0	28.5	28.0	26.5	27.0	23.0	22.5	23.0
18	24.5	23.0	23.5	29.5	28.0	28.5	27.0	25.5	26.0	23.5	22.5	23.0
19	25.0	22.5	23.5	29.5	28.5	29.0	26.5	25.5	26.0	24.0	22.5	23.0
20	23.5	22.5	23.0	29.0	27.5	28.5	27.0	25.5	26.0	23.5	22.5	23.0
21	23.0	21.5	22.5	31.5	29.0	30.5	26.0	24.5	25.5	24.5	22.5	23.5
22	25.5	22.0	24.0	31.5	30.5	31.0	25.5	24.0	24.5	25.5	24.0	24.5
23	26.5	23.5	25.0	30.5	29.0	29.5	27.0	24.5	25.5	26.0	24.5	25.5
24	26.5	24.5	25.5	30.0	28.0	29.0	27.5	25.0	26.0	25.0	23.0	24.0
25	27.0	25.0	26.0	30.0	28.0	29.0	28.5	25.5	26.5	23.5	22.0	22.5
26	27.0	25.5	26.0	30.5	28.5	29.5	27.5	26.0	27.0	22.5	22.0	22.5
27	27.5	25.5	26.5	30.0	28.0	29.5	28.0	27.0	27.5	22.0	20.5	21.5
28	28.5	26.5	27.5	29.5	28.5	29.0	29.0	27.5	28.0	21.0	19.5	20.5
29	28.5	26.5	27.5	29.5	27.5	28.5	29.0	26.5	28.0	21.0	19.5	20.5
30	27.5	27.0	27.0	29.5	27.5	28.5	28.5	27.0	28.0	21.0	19.5	20.0
31	---	---	---	29.5	28.0	29.0	28.5	27.0	27.5	---	---	---
MONTH	28.5	20.5	24.0	31.5	25.0	28.0	32.0	24.0	28.0	30.0	19.5	25.0

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	9.8	9.5	9.7	---	---	---	12.6	12.3	12.4
2	---	---	---	9.7	9.4	9.6	---	---	---	12.5	12.2	12.4
3	---	---	---	10.0	9.7	9.9	---	---	---	12.8	12.5	12.6
4	---	---	---	10.4	10.1	10.3	13.1	12.7	---	12.8	12.4	12.6
5	---	---	---	11.5	10.6	10.8	12.7	12.4	12.6	12.7	12.4	12.6
6	---	---	---	10.7	10.2	10.4	12.4	12.0	12.3	13.0	12.5	12.8
7	---	---	---	10.7	10.3	10.6	12.1	11.7	11.9	13.2	12.9	13.0
8	---	---	---	10.7	10.5	10.6	12.0	11.7	11.8	13.2	12.9	13.1
9	---	---	---	10.8	10.1	10.4	12.2	11.8	12.0	13.4	13.0	13.2
10	---	---	---	10.1	9.6	9.8	12.4	11.8	12.1	13.6	13.4	13.5
11	---	---	---	---	---	---	12.2	11.8	12.0	13.5	12.9	13.2
12	10.2	10.1	---	---	---	---	11.9	11.6	11.8	13.2	12.5	12.8
13	10.4	10.2	10.3	---	---	---	11.6	11.0	11.2	13.4	13.2	13.3
14	10.7	10.3	10.5	7.7	6.8	---	11.6	11.0	11.3	13.2	13.0	13.1
15	10.9	10.6	10.7	7.6	7.2	7.5	12.1	11.4	11.8	13.0	12.6	12.8
16	10.9	10.8	10.8	8.2	7.6	8.0	11.9	11.7	11.8	12.6	12.3	12.5
17	10.8	10.7	10.8	8.3	8.2	8.3	12.6	11.6	12.2	12.[illegible]	12.1	12.2
18	10.8	10.4	10.6	8.4	8.3	8.4	13.0	12.4	12.7	12.2	11.8	11.9
19	10.5	10.2	10.3	8.4	8.3	8.4	13.1	12.7	12.9	12.1	11.7	11.9
20	10.2	9.7	10.0	---	---	---	13.3	12.9	13.1	12.4	11.9	12.2
21	9.7	9.2	9.5	---	---	---	13.5	13.0	13.2	12.4	12.1	12.2
22	9.4	9.1	9.3	---	---	---	13.3	13.0	13.1	12.6	12.1	12.4
23	9.2	8.4	8.9	---	---	---	13.0	12.5	12.8	12.5	12.0	12.3
24	---	---	---	---	---	---	12.5	12.1	12.3	12.3	11.9	12.1
25	---	---	---	---	---	---	12.1	11.7	11.9	12.6	12.1	12.4
26	9.2	8.7	9.0	---	---	---	11.8	11.6	11.7	12.7	12.4	12.6
27	10.0	9.0	9.6	---	---	---	12.3	11.7	12.0	12.7	12.4	12.6
28	---	---	---	---	---	---	12.6	12.1	12.3	12.8	11.4	12.4
29	9.2	7.8	8.7	---	---	---	12.7	12.2	12.4	---	---	---
30	9.7	9.3	9.6	---	---	---	12.5	12.1	12.3	---	---	---
31	9.7	9.6	9.6	---	---	---	12.6	12.1	12.3	---	---	---
MONTH	10.9	7.8	9.9	11.5	6.8	9.5	13.5	11.0	12.2	13.6	11.4	12.6

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	13.1	12.8	12.9	12.0	11.4	11.8	---	---	---
2	---	---	---	13.4	12.6	13.1	11.7	11.1	11.3	---	---	---
3	---	---	---	13.6	12.9	13.1	11.4	10.9	11.2	---	---	---
4	14.9	13.8	---	13.4	13.0	13.2	10.9	10.4	10.6	9.8	9.2	---
5	14.1	11.6	13.1	13.1	12.1	12.5	10.8	10.4	10.6	9.6	8.8	9.2
6	---	---	---	12.1	11.7	11.9	10.9	10.5	10.8	9.0	8.5	8.7
7	---	---	---	11.7	11.2	11.6	11.0	10.3	10.6	9.0	8.0	8.5
8	---	---	---	11.5	10.9	11.3	10.5	10.0	10.3	9.3	7.8	8.4
9	---	---	---	11.3	10.6	11.0	10.1	9.4	9.8	9.6	8.1	8.9
10	---	---	---	11.2	10.3	10.8	10.0	9.6	9.8	10.1	8.6	9.2
11	---	---	---	11.0	10.2	10.5	10.1	9.7	9.9	9.2	8.5	8.8
12	---	---	---	11.1	10.4	10.8	10.2	9.6	9.9	9.0	8.3	8.6
13	---	---	---	11.6	11.0	11.3	10.2	9.4	9.8	8.9	8.2	8.6
14	---	---	---	12.0	11.4	11.7	9.6	9.1	9.3	9.4	8.4	8.9
15	---	---	---	13.2	12.1	12.6	9.5	8.9	9.3	9.2	8.7	9.0
16	12.4	11.8	12.1	13.3	12.6	12.9	9.9	9.3	9.6	9.5	8.8	9.1
17	11.8	11.2	11.6	12.7	11.8	12.3	10.5	9.6	10.2	9.6	8.7	9.1
18	11.4	9.9	10.8	12.0	11.7	11.8	9.8	9.3	9.6	9.1	8.7	8.9
19	9.8	8.3	8.9	11.8	11.4	11.7	---	---	---	9.0	8.4	8.7
20	---	---	---	11.9	11.4	11.8	---	---	---	8.6	8.2	8.3
21	---	---	---	11.5	10.0	11.0	---	---	---	8.2	7.8	8.0
22	---	---	---	11.6	10.1	11.2	---	---	---	8.9	8.1	8.4
23	---	---	---	12.1	11.6	11.9	10.8	9.2	9.9	8.7	8.2	8.5
24	---	---	---	11.9	11.7	11.9	10.6	9.0	9.7	9.5	6.9	8.0
25	11.9	11.6	---	11.8	11.6	11.7	9.8	8.8	9.2	9.3	7.8	8.5
26	12.1	11.4	11.7	11.9	11.8	11.8	9.3	8.6	9.0	9.1	7.8	8.5
27	12.2	11.7	12.0	12.1	11.7	11.9	9.3	8.7	9.0	9.6	7.8	8.9
28	12.3	11.8	12.0	11.7	11.3	11.5	9.6	8.6	9.1	11.0	8.4	9.6
29	12.9	11.8	12.4	11.4	11.0	11.2	---	---	---	10.0	7.6	8.9
30	---	---	---	11.3	11.0	11.2	---	---	---	9.8	7.7	8.7
31	---	---	---	11.5	11.0	11.1	---	---	---	8.8	7.6	8.3
MONTH	14.9	8.3	11.6	13.6	10.0	11.8	12.0	8.6	10.0	11.0	6.9	8.7

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	10.9	7.4	8.9	13.6	6.6	10.3	---	---	---	11.5	7.3	9.1
2	9.1	7.5	8.4	11.8	8.1	10.3	---	---	---	10.8	7.3	9.1
3	8.6	6.8	7.5	9.7	5.2	7.4	---	---	---	12.1	6.8	9.3
4	8.1	6.2	7.2	12.4	4.3	8.3	---	---	---	11.1	5.9	8.4
5	---	---	---	11.1	7.1	9.4	---	---	---	8.8	6.4	7.6
6	---	---	---	10.2	6.0	8.0	---	---	---	11.2	5.7	8.0
7	---	---	---	12.5	7.2	9.8	---	---	---	12.3	7.0	9.6
8	---	---	---	9.7	6.8	8.1	10.4	8.9	---	13.2	8.1	10.6
9	---	---	---	---	---	---	9.8	6.5	8.4	10.5	6.3	8.4
10	10.0	7.2	8.7	---	---	---	11.2	5.3	7.9	11.4	5.4	8.2
11	10.3	7.6	8.9	---	---	---	10.7	5.3	8.0	8.4	6.1	6.9
12	11.5	8.0	9.7	---	---	---	7.8	4.7	6.3	---	---	---
13	---	---	---	---	---	---	10.7	5.1	7.7	---	---	---
14	---	---	---	---	---	---	10.4	5.6	7.8	---	---	---
15	---	---	---	---	---	---	8.5	6.1	7.2	---	---	---
16	---	---	---	---	---	---	8.3	4.2	6.2	7.3	5.7	---
17	---	---	---	---	---	---	10.4	4.9	7.2	5.5	3.9	4.4
18	---	---	---	---	---	---	8.4	5.7	7.2	4.9	3.8	4.3
19	---	---	---	---	---	---	8.3	5.4	6.7	10.1	4.0	6.6
20	---	---	---	---	---	---	10.2	6.0	8.1	7.5	6.0	6.7
21	---	---	---	---	---	---	10.3	7.0	8.5	8.4	4.4	6.2
22	---	---	---	---	---	---	8.6	6.4	7.5	8.1	5.2	6.4
23	---	---	---	---	---	---	9.3	5.8	7.5	10.6	5.7	7.5
24	14.5	12.4	---	---	---	---	10.6	6.3	8.4	8.7	4.2	6.3
25	14.0	10.5	12.4	---	---	---	14.5	7.1	10.0	---	---	---
26	14.3	9.5	12.2	---	---	---	13.4	10.5	12.0	---	---	---
27	13.5	8.9	11.6	---	---	---	---	---	---	---	---	---
28	13.8	9.7	12.1	---	---	---	---	---	---	---	---	---
29	13.0	7.8	11.0	---	---	---	12.0	6.3	---	---	---	---
30	10.9	6.7	8.6	---	---	---	11.4	7.0	9.1	---	---	---
31	---	---	---	---	---	---	9.1	6.7	7.8	---	---	---
MONTH	14.5	6.2	9.8	13.6	4.3	9.0	14.5	4.2	8.0	13.2	3.8	7.6

01474505 SCHUYLKILL RIVER ABOVE PASSYUNK AVENUE AT PHILADELPHIA, PA

LOCATION.--Lat 39°55'18", long 75°12'16", Philadelphia County, Hydrologic Unit 02040203, on west face of Philadelphia Fire Department dock in the embayment off the main channel of the Schuylkill River on left bank 1,200 feet (370 m) upstream from Passyunk Avenue at Philadelphia.

DRAINAGE AREA.--1,900 mi^2 (4,920 km^2).

PERIOD OF RECORD.--September 1978 to current year.

GAGE.--Water stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Corps of Engineers benchmark).

REMARKS.--Records fair. No data Dec. 17 to Feb. 15 and Mar. 15 to Apr. 23.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 7.26 ft (2.213 m) Jan. 25, 1979; minimum, -4.90 ft (-1.494 m) Jan. 18, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum recorded elevation, 6.19 ft (1.887 m) July 19; minimum recorded, -4.16 ft (-1.268 m) Mar. 15.

Summaries of tide elevations during current year are as follows:

	Maximum elevation	High tide date	Minimum elevation	Low tide date	Mean high tide	Mean water level	Mean low tide
Oct.	5.71	2,5	- 3.07	10	4.55	1.50	- 1.97
Nov.	5.88	26	- 3.42	16	4.20	1.14	- 2.39
Dec.	--	--	- 4.09	9	--	--	--
Jan.	--	--	--	--	--	--	--
Feb.	--	--	--	--	--	--	--
Mar.	--	--	- 4.16	15	--	--	--
Apr.	--	--	--	--	--	--	--
May.	5.57	3	- 2.96	15	4.49	1.39	- 2.13
June	6.17	16	- 3.79	9	4.32	1.05	- 2.56
July	6.19	19	- 2.93	6	4.48	1.14	- 2.39
Aug.	6.18	28	- 2.91	16	4.4[illegible]	1.26	- 2.31
Sept	6.17	11	- 3.31	27	4.36	1.21	- 2.30

LAKES AND RESERVOIRS IN SCHUYLKILL RIVER BASIN

01469200 STILL CREEK RESERVOIR.--Lat 40°51'25", long 75°59'30", Schuylkill County, Hydrologic Unit 02040106, at dam on Still Creek, 1 mi (1.6 km) upstream from mouth and 2.3 mi (3.7 km) north of Hometown, Pa. DRAINAGE AREA, 8.5 mi^2 (22.0 km^2). PERIOD OF RECORD, January 1933 to current year. Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Panther Valley Water Co.).

Reservoir formed by earthfill dam, with ungated concrete spillway at elevation 1,182.00 ft (360.274 m). Storage began in February 1933. Capacity at elevation 1,182.00 ft (360.274 m) is 8,290 acre-ft (10.2 hm^3). Reservoir is used for municipal water supply. Figures given herein represent total contents. Regulation is accomplished by valves on pipe through dam. Records furnished by Panther Valley Water Co.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 8,570 acre-ft (10.6 hm^3) Oct. 15, 1955, elevation, 1,182.92 ft (360.554 m), but may have been greater during 1950 or 1951 water years; minimum (after first filling), 588 acre-ft (0.725 hm^3) Dec. 8, 1944, elevation, 1,136.70 ft (346.466 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 8,408.8 acre-ft (10.4 hm^3) Oct. 7, 8, elevation, 1,182.4 ft (360.396 m); minimum, 7,095.6 acre-ft (8.75 hm^3) Sept. 30, elevation, 1,177.80 ft (358.993 m).

01470870 BLUE MARSH LAKE.--Lat 40°22'45", long 76°01'59", Berks County, Hydrologic Unit 02040203, at dam on Tulpehocken Creek, 0.8 mi (1.3 km) upstream from gaging station on Tulpehocken Creek, 1.0 mi (1.6 km) northeast of Blue Marsh, 1.9 mi (3.1 km) upstream from Reber's Bridge, and 5.1 mi (8.2 km) southeast of Bernville. DRAINAGE AREA, 175 mi^2 (453 km^2). PERIOD OF RECORD, April 1979 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Reservoir formed by earthfill dam, with concrete ungated spillway at elevation 307.00 ft (93.574 m). Storage began April 23, 1979. Capacity at elevation 307.00 ft (93.574 m) is 50,000 acre-ft (61.6 hm^3). Dead storage is 3,000 acre-ft (3.70 hm^3). Reservoir is used for flood control, water supply, and recreation. Figures herein represent total contents. Records furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 26,250 acre-ft (32.4 hm^3) Oct. 4, 1979, elevation, 292.78 ft (89.239 m); minimum (after first filling), 16,760 acre-ft (20.7 m^3) Nov. 1, 1979, elevation, 284.09 ft (86.591 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 26,250 acre-ft (32.4 hm^3) Oct. 4, elevation, 292.78 ft (89.239 m); minimum, 16,760 acre-ft (20.7 m^3) Nov. 1, elevation, 284.09 ft (86.591 m).

01472200 GREEN LANE RESERVOIR.--Lat 40°20'30", long 75°28'45", Montgomery County, Hydrologic Unit 02040203, at dam on Perkiomen Creek, 0.4 mi (0.6 km) west of Green Lane and 2.1 mi (3.4 km) upstream from Unami Creek. DRAINAGE AREA, 70.9 mi^2 (183.6 km^2). PERIOD OF RECORD, December 1956 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Philadelphia Suburban Water Co.).

Reservoir formed by concrete, gravity-type dam, with ungated spillway at elevation 286.00 ft (87.173 m). Storage began December 21, 1956. Capacity at elevation 286.00 ft (87.173 m) is 13,430 acre-ft (16.6 hm^3). Reservoir is used for municipal water supply. Figures given herein represent total contents. Regulation is accomplished by valves on pipe through dam. Records furnished by Philadelphia Suburban Water Co.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 17,030 acre-ft (21.0 hm^3) June 23, 1972, elevation, 290.05 ft (88.407 m), minimum (after first filling), 1,270 acre-ft (1.57 hm^3) Aug. 25, 1957, elevation, 251.60 ft (76.688 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 14,380 acre-ft (17.7 hm^3) Sept. 5, elevation, 287.07 ft (87.499 m), minimum, 6,840 acre-ft (8.43 hm^3) Sept. 30, elevation, 275.38 ft (83.936 m).

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in cfs)	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in cfs)
	01469200 Still Creek Reservoir			01470870 Blue Marsh Dam		
Sept. 30	1181.40	8110	--	289.81	22680	--
Oct. 31	1182.02	8290	+ 2.9	284.14	16810	- 95.5
Nov. 30	1182.10	8320	+ 0.5	285.37	17990	+ 19.8
Dec. 31	1182.07	8310	- 0.2	285.44	18060	+ 1.1
CAL YR 1979	--	--	+ 1.9	--	--	+ 24.9
Jan. 31	1181.90	8260	- 0.8	285.00	17620	- 7.2
Feb. 29	1181.70	8200	- 1.0	284.97	17590	- 0.5
Mar. 31	1182.15	8330	+ 2.1	285.57	18180	+ 9.6
Apr. 30	1182.15	8330	0	290.26	23200	+ 84.4
May 31	1182.00	8290	- 0.7	289.87	22750	- 7.3
June 30	1181.50	8140	- 2.5	289.99	22890	+ 2.4
July 31	1180.20	7760	- 6.2	289.60	22450	- 7.2
Aug. 31	1178.90	7400	- 5.9	288.63	21360	- 17.7
Sept. 30	1177.80	7100	- 5.0	286.52	19130	- 37.5
WTR YR 1980	--	--	- 1.4	--	--	- 4.9

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in cfs)
	01472200 Green Lane Reservoir		
Sept. 30	286.00	13430	--
Oct. 31	286.00	13430	0
Nov. 30	286.07	13490	+ 1.0
Dec. 31	286.00	13430	- 1.0
CAL YR 1979	--	--	- .2
Jan. 31	285.88	13330	- 1.6
Feb. 29	285.88	13330	0
Mar. 31	286.37	13760	+ 7.0
Apr. 30	286.21	13620	- 2.4
May 31	286.00	13430	- 3.1
June 30	285.40	12900	- 8.9
July 31	283.90	11680	- 19.8
Aug. 31	279.50	8900	- 45.2
Sept. 30	275.38	6840	- 34.6
WTR YR 1980	--	--	- 9.1

01475300 DARBY CREEK AT WATERLOO MILLS NEAR DEVON, PA

LOCATION.--Lat 40°01'21", long 75°25'20", Chester County, Hydrologic Unit 02040202, on left bank 125 ft (38 m) upstream from bridge on Waterloo Road, 2 mi (3.2 km) south of Devon, and 2.5 mi (4.0 km) northwest of Newtown Square.

DRAINAGE AREA.--5.15 mi^2 (13.3 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 310 ft (94 m), from topographic map.

REMARKS.--Records good. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--8 years, 10.6 ft^3/s (0.300 m^3/s), 28.03 in/yr (712 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,800 ft^3/s (51.0 m^3/s) Sept. 6, 1979, gage height, 6.71 ft (2.045 m); minimum, 0.86 ft^3/s (0.024 m^3/s) Nov. 11, 1976; minimum gage height, 1.25 ft (0.381 m) Sept. 7, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft^3/s (5.66 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 1	1215	312	8.84	3.81	1.161	Mar. 21	1400	427	12.1	4.22	1.286
*Nov. 26	1200	*840	23.8	*5.20	1.585						

Minimum discharge, 1.1 ft^3/s (0.031 m^3/s) Sept. 7, 24, 25, 28, 29, 30; minimum gage height, 1.25 ft (0.381 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	9.5	12	7.8	5.6	3.8	36	21	6.7	3.7	4.4	1.9
2	15	9.7	12	7.6	5.5	4.1	20	12	6.4	3.5	2.5	1.8
3	22	35	11	7.5	5.4	3.9	16	11	7.0	3.7	2.5	1.6
4	12	10	11	7.3	5.4	4.0	24	9.6	5.9	3.5	2.3	1.4
5	30	9.3	11	7.6	5.4	5.9	14	9.3	5.4	5.1	2.3	1.6
6	14	8.5	12	7.3	5.3	4.8	12	9.0	5.4	4.6	2.3	1.4
7	11	8.3	13	7.4	5.4	4.5	11	9.0	5.1	3.1	2.1	1.4
8	11	8.4	11	7.4	5.4	6.2	11	12	6.7	3.3	2.0	1.4
9	15	8.2	11	7.2	5.4	5.7	34	9.0	5.7	2.9	2.0	1.4
10	60	15	9.8	7.0	5.4	5.0	20	8.4	6.4	2.7	2.0	1.4
11	18	14	9.4	24	5.1	8.1	13	9.0	5.1	2.7	2.1	1.4
12	18	16	9.2	21	5.1	4.6	12	13	4.6	2.1	4.4	1.3
13	15	9.8	14	8.4	4.9	9.8	11	15	4.4	1.9	2.0	1.3
14	12	9.3	11	8.3	5.0	21	12	8.7	4.9	2.5	1.9	1.3
15	12	8.5	9.4	7.8	5.0	12	13	8.2	9.6	2.5	2.1	2.3
16	11	8.4	9.1	7.3	8.6	9.1	11	7.9	9.0	17	2.0	2.3
17	11	8.2	9.3	7.2	5.5	8.7	10	7.3	4.9	5.4	1.9	1.6
18	10	7.9	8.4	11	4.8	12	10	12	4.9	3.1	1.9	4.9
19	10	7.7	8.5	13	4.7	7.2	9.6	11	4.4	3.1	1.9	1.7
20	9.9	7.9	8.5	8.3	4.8	6.7	9.2	9.0	5.1	2.9	1.9	1.4
21	9.6	8.6	8.4	7.8	5.2	87	8.9	14	4.6	2.9	1.9	1.3
22	10	7.4	8.9	8.1	9.0	15	8.5	8.7	4.1	3.1	1.8	1.3
23	12	7.2	9.9	8.2	7.5	11	8.2	7.6	3.7	3.7	1.8	1.2
24	20	7.2	9.7	7.0	6.4	12	8.2	7.3	3.3	3.1	1.8	1.1
25	11	7.2	19	6.9	5.8	22	7.8	7.0	3.9	2.5	1.8	2.0
26	11	141	10	6.9	5.2	11	7.8	6.4	3.7	2.5	1.7	2.1
27	10	19	9.0	6.7	4.7	10	10	6.2	3.5	2.5	1.6	1.6
28	12	14	8.4	6.7	4.5	9.2	21	5.9	3.7	2.5	1.4	1.2
29	11	13	8.2	6.6	4.2	19	19	5.9	4.6	3.9	1.4	1.2
30	9.9	12	8.1	6.1	---	12	17	5.9	7.3	2.7	1.4	1.1
31	9.6	---	7.9	6.0	---	51	---	9.9	---	2.5	2.7	---
TOTAL	493.0	456.2	318.1	267.4	160.2	406.3	425.2	296.2	160.0	111.2	65.8	48.9
MEAN	15.9	15.2	10.3	8.63	5.52	13.1	14.2	9.55	5.33	3.59	2.12	1.63
MAX	60	141	19	24	9.0	87	36	21	9.6	17	4.4	4.9
MIN	9.6	7.2	7.9	6.0	4.2	3.8	7.8	5.9	3.3	1.9	1.4	1.1
CFSM	3.09	2.95	2.00	1.68	1.07	2.54	2.76	1.85	1.04	.70	.41	.32
IN.	3.56	3.29	2.30	1.93	1.16	2.93	3.07	2.14	1.16	.80	.48	.35

CAL YR 1979 TOTAL 5917.4 MEAN 16.2 MAX 227 MIN 2.0 CFSM 3.15 IN 42.73
WTR YR 1980 TOTAL 3208.5 MEAN 8.77 MAX 141 MIN 1.1 CFSM 1.70 IN 23.17

01475300 DARBY CREEK AT WATERLOO MILLS NEAR DEVON, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1970 to current year.

WATER QUALITY DATA, OCTOBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT										
30...	1300	6.6	210	7.2	10.5	11.8	34	18	17	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS NH4)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)
OCT										
30...	15	2.3	2.1	.070	.08	.58	.65	3.0	13	.110

DATE	PHOS-PHORUS, TOTAL (MG/L AS PO4)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
OCT									
30...	.34	0	0	10	10	0	.2	0	10

01475510 DARBY CREEK NEAR DARBY, PA

LOCATION.--Lat 39°55'44", long 75°16'22", Delaware County, Hydrologic Unit 02040202, on right bank 20 ft (6 m) upstream from Providence Road Bridge, 1.1 mi (1.8 km) northwest of Upper Darby, 2.3 mi (3.7 km) upstream from Cobbs Creek, and 8.4 mi (13.5 km) upstream from mouth.

DRAINAGE AREA.--37.4 mi^2 (96.9 km^2).

PERIOD OF RECORD.--February 1964 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 19.41 ft (5.916 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--16 years, 70.1 ft^3/s (1.985 m^3/s), 25.46 in/yr (647 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,920 ft^3/s (168 m^3/s) Aug. 23, 1974, gage height, 10.23 ft (3.118 m), from rating curve extended above 920 ft^3/s (26 m^3/s) on basis of step-backwater analysis; minimum, 8.2 ft^3/s (0.23 m^3/s) Sept. 12, 13, 1980; minimum gage height, 1.16 ft (0.354 m) Sept. 2, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 800 ft^3/s (22.7 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 1	unknown	1,200	34.0	unknown		Apr. 9	1115	948	26.8	4.04	1.231
Nov. 26	1645	1,060	30.0	4.29	1.308	Sept. 18	0115	1,300	36.8	4.76	1.451
*Mar. 21	1630	*1,530	44.7	*5.32	1.622						

Minimum discharge, 8.2 ft^3/s (0.23 m^3/s) Sept. 12, 13, gage height, 1.17 ft (0.357 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	330	54	56	46	37	25	204	100	47	29	51	14
2	100	54	55	46	36	27	125	78	44	27	20	12
3	117	216	53	46	36	26	94	70	52	28	19	10
4	74	74	53	45	36	26	173	64	43	28	18	9.9
5	192	59	52	48	35	39	95	62	37	32	30	10
6	103	56	58	46	35	32	82	60	36	50	19	11
7	66	56	69	47	36	30	78	61	37	25	15	10
8	59	54	51	45	36	40	74	98	45	24	14	9.4
9	74	53	48	46	36	36	306	62	38	24	14	9.4
10	410	98	49	44	35	60	201	60	49	23	13	8.8
11	70	94	48	175	33	75	95	65	37	23	15	8.8
12	100	158	48	206	33	37	84	114	34	22	79	8.8
13	86	68	85	66	32	90	80	114	33	20	18	8.8
14	74	64	65	59	33	216	96	57	32	20	15	8.8
15	74	58	50	56	33	79	106	51	42	20	16	13
16	68	56	51	52	66	63	80	48	72	92	17	10
17	68	56	56	50	34	55	75	46	34	64	13	10
18	63	53	46	64	32	87	67	86	32	28	13	169
19	62	51	48	104	32	51	66	74	29	22	15	13
20	61	51	48	55	33	47	64	71	30	21	14	9.9
21	60	51	47	51	35	529	62	99	29	21	13	10
22	61	51	51	57	56	123	60	57	29	47	13	9.9
23	61	50	54	59	46	72	59	50	29	30	13	9.4
24	92	50	56	50	40	75	58	47	29	27	13	8.8
25	63	50	128	48	35	223	56	46	28	20	12	15
26	59	398	60	46	33	74	56	43	28	19	11	17
27	58	124	52	45	32	65	64	41	28	18	11	11
28	74	72	49	44	30	64	140	41	27	18	11	10
29	63	63	48	43	27	109	125	41	36	77	11	9.9
30	56	58	47	41	---	93	150	40	90	23	11	9.9
31	54	---	47	38	---	136	---	59	---	19	17	---
TOTAL	2952	2450	1728	1868	1053	2704	3075	2005	1156	941	564	475.5
MEAN	95.2	81.7	55.7	60.3	36.3	87.2	103	64.7	38.5	30.4	18.2	15.9
MAX	410	398	128	206	66	529	306	114	90	92	79	169
MIN	54	50	46	38	27	25	56	40	27	18	11	8.8
CFSM	2.55	2.18	1.49	1.61	.97	2.33	2.75	1.73	1.03	.81	.49	.43
IN.	2.94	2.44	1.72	1.86	1.05	2.69	3.06	1.99	1.15	.94	.56	.47

CAL YR 1979 TOTAL 36444.0 MEAN 99.8 MAX 1310 MIN 27 CFSM 2.67 IN 36.25
WTR YR 1980 TOTAL 20971.5 MEAN 57.3 MAX 529 MIN 8.8 CFSM 1.53 IN 20.86

01475530 COBBS CREEK AT U.S. HIGHWAY NO. 1 AT PHILADELPHIA, PA

LOCATION.--Lat 39°59'29", long 75°16'49", Philadelphia County, Hydrologic Unit 02040203, on left bank 30 ft (9 m) downstream from bridge on U.S. Highway No. 1 and 50 ft (15 m) upstream from unnamed tributary at west city limits of Philadlephia.

DRAINAGE AREA.--4.78 mi^2 (12.4 km^2).

PERIOD OF RECORD.--October 1964 to current year. Prior to October 1973 published as "near Philadelphia."

GAGE.--Water-stage recorder, concrete control, and crest-stage gage. Datum of gage is 121.76 ft (37.112 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--16 years, 7.44 ft^3/s (0.211 m^3/s), 21.14 in/yr (537 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,480 ft^3/s (98.6 m^3/s) Aug. 23, 1974, gage height, 10.48 ft (3.194 m), from rating curve extended above 160 ft^3/s (4.5 m^3/s) on basis of computation of flow through culvert at gage height 9.18 ft (2.798 m); minimum, 0.3 ft^3/s (0.008 m^3/s) Oct. 13, Nov. 24, 25, 1965; minimum gage height, 2.03 ft (0.619 m) Nov. 25, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 250 ft^3/s (7.08 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 1	1230	*690	19.5	*6.35	1.935	Sept. 18	0045	287	8.13	4.92	1.500

Minimum discharge, 1.1 ft^3/s (0.031 m^3/s) many days in September, gage height, 2.12 ft (0.646 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	8.2	5.8	5.6	4.5	4.7	33	15	5.2	3.9	7.5	1.8
2	12	8.3	5.8	5.4	4.5	4.8	12	7.5	5.5	3.9	3.2	1.7
3	13	43	5.8	5.5	4.4	4.6	11	6.8	6.5	3.9	3.4	1.7
4	9.2	8.4	5.7	5.6	4.4	5.0	24	6.5	5.2	3.9	2.8	1.7
5	32	7.8	5.7	6.0	4.3	8.9	8.2	6.1	4.9	7.2	5.2	1.7
6	12	7.2	5.6	5.4	4.3	7.9	7.9	5.8	4.9	4.9	3.4	1.7
7	9.4	6.8	15	5.2	4.4	7.9	7.2	6.8	4.9	3.9	2.8	1.4
8	9.2	6.9	5.2	5.2	4.3	13	7.2	12	7.9	3.9	2.2	1.7
9	21	6.8	5.4	5.6	4.3	9.6	43	6.1	5.8	3.7	2.2	1.4
10	58	13	5.4	5.2	4.3	16	21	5.8	7.2	3.4	2.2	1.7
11	12	12	5.4	33	4.3	11	7.9	7.2	4.9	3.4	2.6	1.4
12	14	14	5.4	18	4.3	7.2	7.5	21	4.7	3.4	12	1.4
13	10	8.0	14	6.5	4.2	26	7.2	12	4.4	3.2	2.6	1.7
14	8.9	7.3	6.1	6.5	4.3	27	9.6	6.5	4.4	3.2	2.4	1.7
15	8.9	6.9	5.8	5.8	4.5	8.6	8.6	6.5	11	3.2	3.7	3.2
16	8.6	6.8	6.1	5.8	9.3	7.2	6.1	6.5	7.9	15	2.6	1.4
17	8.2	6.5	6.5	5.5	4.9	7.2	6.1	6.1	4.7	4.9	2.2	2.8
18	7.8	6.4	5.5	12	4.9	13	6.1	12	4.4	3.9	2.4	15
19	7.8	6.3	5.5	8.6	4.9	6.5	6.1	16	4.4	3.7	2.4	1.8
20	7.8	6.2	5.5	5.8	4.9	6.5	6.5	6.8	4.4	3.4	2.4	1.8
21	7.6	6.0	5.5	5.5	4.9	75	6.5	13	4.2	3.4	2.2	1.8
22	7.8	6.1	6.5	7.2	10	12	6.5	6.1	4.2	8.2	2.2	2.0
23	9.0	6.2	6.1	6.1	5.8	8.2	6.5	5.5	3.9	4.7	2.2	1.8
24	18	6.6	6.5	5.5	4.9	13	6.1	5.5	3.9	3.9	2.0	1.8
25	9.4	6.2	20	5.5	5.2	36	6.5	5.5	3.9	3.4	1.8	4.7
26	9.4	35	6.0	5.5	4.9	8.9	6.1	5.0	3.9	3.2	1.8	2.2
27	8.4	7.2	5.8	5.2	4.9	8.2	10	5.0	3.9	3.0	1.8	1.8
28	9.6	6.0	5.6	4.9	4.9	8.2	24	5.0	3.9	3.2	1.7	2.2
29	8.8	5.8	5.6	4.8	4.8	27	16	4.8	5.5	12	1.8	2.0
30	8.3	5.8	5.6	4.7	---	9.3	19	4.8	14	3.2	2.0	2.0
31	8.2	---	5.6	4.5	---	68	---	6.0	---	3.2	3.2	---
TOTAL	429.3	287.7	210.0	221.6	144.5	476.4	353.4	245.2	164.5	141.3	92.9	71.0
MEAN	13.8	9.59	6.77	7.15	4.98	15.4	11.8	7.91	5.48	4.56	3.00	2.37
MAX	58	43	20	33	10	75	43	21	14	15	12	15
MIN	7.6	5.8	5.2	4.5	4.2	4.6	6.1	4.8	3.9	3.0	1.7	1.4
CFSM	2.89	2.01	1.42	1.50	1.04	3.22	2.47	1.66	1.15	.95	.63	.50
IN.	3.34	2.24	1.63	1.72	1.12	3.71	2.75	1.91	1.28	1.10	.72	.55

CAL YR 1979 TOTAL 4080.2 MEAN 11.2 MAX 178 MIN 3.2 CFSM 2.34 IN 31.75
WTR YR 1980 TOTAL 2837.8 MEAN 7.75 MAX 75 MIN 1.4 CFSM 1.62 IN 22.08

01475550 COBBS CREEK AT DARBY, PA

LOCATION.--Lat 39°55'02", long 75°14'52", Delaware County, Hydrologic Unit 02040202, on right bank 60 ft (18 m) upstream from dam, 200 ft (61 m) upstream from bridge on Woodland Avenue, at Darby, and 1.1 mi (1.8 km) upstream from mouth.

DRAINAGE AREA.--22.0 mi^2 (57.0 km^2).

PERIOD OF RECORD.--February 1964 to current year.

REVISED RECORDS.--WDR PA-75-1: 1974(M).

GAGE.--Water-stage recorder and masonry control. Datum of gage is 11.93 ft (3.636 m) National Geodetic Vertical Datum of 1929. Prior to Apr. 29, 1964, nonrecording gage at same site and datum.

REMARKS.--Records good. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--16 years, 31.0 ft^3/s (0.878 m^3/s), 19.15 in/yr (486 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,490 ft^3/s (127 m^3/s) June 29, 1973, gage height, 10.98 ft (3.347 m), from rating curve extended above 850 ft^3/s (24.1 m^3/s) on basis of computation of peak flow through culvert; maximum gage height, 12.85 ft (3.917 m) Aug. 23, 1974, backwater from storage tank; no flow on many days in 1964-66.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft^3/s (34.0 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 1	1200	1,430	40.5	4.95	1.509	Sept. 18	0130	1,600	45.3	5.31	1.618
Aug. 5	unknown	*1,990	56.4	*6.14	1.871						

Minimum discharge, 5.5 ft^3/s (0.16 m^3/s) March 1, gage height, 1.26 ft (0.384 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	250	22	17	16	13	11	120	62	21	12	35	9.8
2	27	22	17	16	13	11	39	30	22	11	13	12
3	35	160	17	16	12	11	30	29	35	13	14	9.0
4	17	26	17	16	12	11	120	24	18	11	11	7.9
5	161	24	17	17	12	18	29	23	16	30	30	8.1
6	27	23	17	16	12	11	24	23	16	29	23	8.1
7	18	21	48	16	12	10	23	27	18	10	12	7.5
8	17	21	16	16	12	22	22	54	26	9.8	12	7.3
9	60	21	17	17	12	16	206	24	16	10	12	7.5
10	287	56	18	16	12	91	43	22	30	10	11	7.3
11	32	54	18	164	12	58	37	26	16	10	13	7.0
12	43	60	18	70	11	13	35	91	14	9.8	118	7.1
13	39	34	39	17	11	114	32	58	13	8.8	12	7.3
14	37	21	39	17	11	120	60	24	13	8.8	11	7.5
15	35	21	17	16	11	22	32	22	37	9.0	12	14
16	32	20	17	16	41	16	29	21	39	100	13	7.4
17	30	19	30	16	13	16	27	21	15	17	9.2	7.3
18	29	18	17	52	12	43	23	54	13	13	9.0	264
19	29	18	17	43	11	16	22	56	12	11	10	8.7
20	27	17	17	16	11	15	22	29	12	14	9.6	7.1
21	24	17	17	16	11	317	22	56	12	18	9.1	7.1
22	24	18	21	24	37	37	22	24	12	98	9.2	7.1
23	27	21	27	22	18	18	22	22	12	49	9.7	6.5
24	41	22	23	16	12	35	22	22	12	12	9.0	6.0
25	22	21	68	16	12	171	22	21	12	9.4	8.8	12
26	22	168	17	16	11	21	22	20	12	9.2	8.7	8.5
27	21	29	16	15	11	17	52	20	13	8.6	8.7	5.9
28	25	18	16	15	11	16	117	20	14	9.0	8.6	6.0
29	23	17	16	14	10	91	88	18	27	60	8.8	5.9
30	22	17	16	14	---	24	131	18	94	12	8.5	6.0
31	22	---	16	14	---	302	---	24	---	12	10	---
TOTAL	1505	1026	683	771	399	1694	1495	985	622	644.4	488.9	492.9
MEAN	48.5	34.2	22.0	24.9	13.8	54.6	49.8	31.8	20.7	20.8	15.8	16.4
MAX	287	168	68	164	41	317	206	91	94	100	118	264
MIN	17	17	16	14	10	10	22	18	12	8.6	8.5	5.9
CFSM	2.21	1.56	1.00	1.13	.63	2.48	2.26	1.45	.94	.95	.72	.75
IN.	2.54	1.73	1.15	1.30	.67	2.86	2.53	1.67	1.05	1.09	.83	.83

CAL YR 1979 TOTAL 18281.0 MEAN 50.1 MAX 665 MIN 12 CFSM 2.28 IN 30.91
WTR YR 1980 TOTAL 10806.2 MEAN 29.5 MAX 317 MIN 5.9 CFSM 1.34 IN 18.27

CHESTER CREEK BASIN

01477000 CHESTER CREEK NEAR CHESTER, PA

LOCATION.--Lat 39°52'08", long 75°24'31", Delaware County, Hydrologic Unit 02040202, on right bank 30 ft (9 m) downstream from Dutton Mill Bridge and 3 mi (5 km) northwest of Chester.

DRAINAGE AREA.--61.1 mi^2 (158.2 km^2).

PERIOD OF RECORD.--August 1931 to current year. Monthly discharges only for some periods, published in WSP 1302.

REVISED RECORDS.--WDR PA-72: 1971.

GAGE.--Water-stage recorder. Datum of gage is 23.41 ft (7.135 m) Penn Central Railroad datum. Prior to June 27, 1966, water-stage recorder at site 50 ft (15 m) upstream and June 28, 1966, to Oct. 4, 1967, nonrecording gage 150 ft (46 m) upstream, all at same datum.

REMARKS.--Records poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--49 years, 87.4 ft^3/s (2.475 m^3/s), 19.42 in/yr (493 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,000 ft^3/s (595 m^3/s) Sept. 13, 1971, gage height, 24.59 ft (7.495 m), from floodmark, from rating curve extended above 2,400 ft^3/s (68.0 m^3/s) on basis of contracted-opening measurement at gage height 13.57 ft (4.136 m) and slope-area measurement of peak flow; minimum, 0.3 ft^3/s (0.008 m^3/s) Aug. 7, 1934, gage height, 0.28 ft (0.085 m); minimum daily, 6.5 ft^3/s (0.18 m^3/s) Sept. 25, 1941.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,400 ft^3/s (39.6 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 26	1645	*2,360	66.8	*8.12	2.475	Mar. 21	1600	2,060	58.3	7.56	2.304

Minimum discharge, 17 ft^3/s (0.48 m^3/s) Sept. 12, 13, 14, 16, 17, gage height, 2.65 ft (0.808 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	650	124	117	105	100	70	1070	536	140	50	44	26
2	523	127	115	100	100	65	600	257	129	49	37	23
3	414	353	110	100	100	60	500	177	124	49	35	22
4	344	199	110	95	105	65	818	142	129	48	34	22
5	349	162	110	95	100	70	600	134	112	45	32	22
6	325	145	112	90	100	68	500	132	101	47	31	22
7	242	134	145	90	110	63	400	132	97	42	30	20
8	217	129	110	87	105	81	350	174	103	42	30	20
9	203	127	101	87	101	91	400	140	99	42	29	20
10	739	190	103	85	99	77	895	127	119	42	27	19
11	500	174	103	254	101	127	600	127	100	42	29	20
12	300	273	108	358	97	79	500	199	62	40	56	20
13	200	159	159	127	95	103	450	246	57	38	33	19
14	130	148	162	117	95	536	400	153	54	37	29	18
15	117	134	137	115	95	290	656	132	57	37	30	20
16	115	129	134	110	108	238	500	124	79	43	29	20
17	110	124	140	108	112	206	400	119	65	68	26	20
18	110	119	132	117	99	246	350	171	57	43	27	60
19	105	115	110	190	95	203	300	150	53	[illegible]	32	29
20	103	112	100	132	95	183	260	165	51	[illegible]	31	26
21	103	110	110	122	95	834	220	190	50	39	26	25
22	101	105	110	122	105	854	200	156	49	44	26	25
23	101	105	100	140	117	436	180	129	53	57	26	24
24	224	105	110	122	112	383	160	122	48	60	24	22
25	140	103	242	117	100	628	150	122	53	38	23	26
26	129	1060	153	115	90	464	140	112	51	37	23	30
27	124	358	134	112	85	409	130	108	48	35	23	26
28	145	193	125	112	80	378	150	99	46	35	23	23
29	145	140	120	112	75	517	300	101	48	51	23	23
30	132	122	115	108	---	568	210	108	95	39	23	23
31	124	---	110	100	---	818	---	119	---	42	29	---
TOTAL	7264	5578	3847	3844	2871	9210	12389	4903	2329	1360	920	715
MEAN	234	186	124	124	99.0	297	413	158	77.6	43.9	29.7	23.8
MAX	739	1060	242	358	117	854	1070	536	140	68	56	60
MIN	101	103	100	85	75	60	130	99	46	35	23	18
CFSM	3.83	3.04	2.03	2.03	1.62	4.86	6.76	2.59	1.27	.72	.49	.39
IN.	4.42	3.40	2.34	2.34	1.75	5.61	7.54	2.99	1.42	.83	.56	.44

CAL YR 1979 TOTAL 70231 MEAN 192 MAX 2340 MIN 47 CFSM 3.14 IN 42.76
WTR YR 1980 TOTAL 55230 MEAN 151 MAX 1070 MIN 18 CFSM 2.47 IN 33.63

01477050 DELAWARE RIVER AT CHESTER, PA

LOCATION.--Lat 39°50'12", long 75°22'00", Delaware County, Hydrologic Unit 02040202, water-quality recorder located at auxiliary tidal-gaging station at end of Reynolds Aluminum Company pier, 0.5 mi (0.8 km) downstream from Chester Creek in Chester.

DRAINAGE AREA.--10,300 mi² (26,700 km²).

PERIOD OF RECORD.--December 1961 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1963 to current year.
pH: January 1968 to current year.
WATER TEMPERATURES: December 1961 to current year.
DISSOLVED OXYGEN: December 1961 to current year.

REMARKS.--Not operated July 11, 1980, through Sept. 30, 1980. Other interruptions in the record were due to malfunctions of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 5,900 micromhos Oct. 7, 1965; minimum, 111 micromhos Apr. 26, 27, 1972.
pH: Maximum, 8.7 Sept. 13, 14, 1971 and Oct. 16, 1979; minimum 5.5 Dec. 10, 11, 1969.
WATER TEMPERATURES: Maximum, 33.0°C July 21, 1977: minimum, freezing point on many days during winter months.
DISSOLVED OXYGEN: Maximum, 13.5 mg/L Apr. 20, 1979; minimum, 0.0 mg/L on many days.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	316	282	297	311	257	270	247	227	234	---	---	---
2	323	282	304	286	258	273	241	226	232	---	---	---
3	330	277	294	280	256	268	241	218	228	---	---	---
4	288	270	277	282	256	268	244	208	225	---	---	---
5	---	---	---	287	266	275	247	204	219	---	---	---
6	---	---	---	297	271	280	234	204	216	---	---	---
7	---	---	---	290	261	275	237	201	212	---	---	---
8	---	---	---	288	260	270	281	195	218	---	---	---
9	237	229	---	280	257	268	229	194	202	---	---	---
10	240	213	226	284	256	267	230	198	207	---	---	---
11	230	206	216	282	250	262	239	199	212	---	---	---
12	235	196	207	266	245	255	237	207	216	---	---	---
13	215	187	195	270	247	258	233	209	218	---	---	---
14	198	181	187	264	249	255	236	200	219	---	---	---
15	208	180	189	263	245	252	233	212	222	---	---	---
16	221	184	196	260	243	253	237	217	228	---	---	---
17	225	190	204	268	240	250	254	221	235	---	---	---
18	228	194	208	257	238	247	259	228	240	---	---	---
19	227	199	211	255	235	246	254	210	242	---	---	---
20	232	203	215	255	238	245	260	234	246	---	---	---
21	237	206	221	262	241	248	265	237	252	---	---	---
22	243	213	227	263	243	251	275	247	261	---	---	---
23	246	217	228	261	245	253	286	255	267	---	---	---
24	254	221	231	268	248	255	281	258	270	---	---	---
25	250	222	233	264	251	257	283	262	272	---	---	---
26	245	225	236	270	195	250	284	267	275	---	---	---
27	252	230	241	270	191	248	296	272	283	---	---	---
28	265	232	248	288	261	274	302	283	290	309	297	---
29	265	246	254	265	211	250	---	---	---	311	298	303
30	267	246	258	244	228	236	---	---	---	313	298	302
31	272	252	260	---	---	---	---	---	---	315	297	304
MONTH	330	180	233	311	191	259	302	194	237	315	297	303

01477050 DELAWARE RIVER AT CHESTER, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	316	299	305	579	441	504	209	174	186	241	212	225
2	313	300	306	662	440	521	210	184	197	237	209	219
3	316	301	308	726	460	559	213	187	198	229	213	219
4	317	303	309	934	482	644	206	184	194	231	210	220
5	322	307	313	831	484	615	217	182	193	231	214	221
6	322	309	---	689	473	573	206	182	192	230	213	221
7	---	---	---	731	471	569	204	181	191	223	209	217
8	---	---	---	735	472	584	204	181	191	225	206	214
9	---	---	---	682	470	568	259	188	202	248	206	216
10	---	---	---	685	474	573	209	185	196	254	205	220
11	390	331	---	750	454	549	212	195	203	241	207	215
12	386	330	353	559	436	494	212	187	197	226	206	214
13	413	333	365	574	428	487	209	186	195	240	197	211
14	424	342	375	730	421	515	210	181	193	232	204	216
15	453	348	385	516	417	450	214	187	195	238	205	220
16	954	358	468	531	400	455	201	181	191	234	209	223
17	582	375	447	510	412	459	198	172	185	238	216	224
18	638	379	460	510	383	423	211	173	184	241	212	224
19	575	383	461	480	384	418	197	173	183	237	208	223
20	666	396	496	449	353	393	217	173	186	234	213	223
21	805	422	566	396	241	347	200	179	190	249	216	227
22	831	425	586	315	241	278	210	181	191	235	217	226
23	921	432	610	283	214	243	209	182	193	248	224	234
24	757	444	581	230	180	204	206	186	195	239	225	231
25	749	444	574	205	166	185	210	189	198	236	221	229
26	744	448	560	191	153	171	213	191	199	237	217	225
27	942	458	600	189	152	167	215	191	202	---	---	---
28	650	452	549	183	150	168	222	194	207	---	---	---
29	639	450	527	191	155	173	222	193	208	---	---	---
30	---	---	---	194	167	180	250	208	229	---	---	---
31	---	---	---	202	168	185	---	---	---	---	---	---
MONTH	954	299	457	934	150	408	259	172	195	254	197	221

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	477	319	379						
2	---	---	---	444	319	377						
3	---	---	---	434	310	371						
4	---	---	---	431	324	377						
5	---	---	---	454	331	387						
6	---	---	---	456	334	382						
7	---	---	---	435	327	371						
8	---	---	---	470	321	384						
9	---	---	---	507	332	396						
10	---	---	---	590	355	423						
11	289	256	---	---	---	---						
12	288	253	270	---	---	---						
13	321	250	267	---	---	---						
14	315	258	274	---	---	---						
15	289	256	274	---	---	---						
16	282	257	268	---	---	---						
17	290	260	275	---	---	---						
18	310	277	291	---	---	---						
19	326	277	302	---	---	---						
20	330	286	306	---	---	---						
21	335	282	304	---	---	---						
22	331	283	308	---	---	---						
23	341	283	313	---	---	---						
24	348	297	320	---	---	---						
25	367	299	331	---	---	---						
26	369	306	338	---	---	---						
27	405	303	351	---	---	---						
28	398	315	357	---	---	---						
29	470	317	373	---	---	---						
30	480	318	367	---	---	---						
31	---	---	---	---	---	---						
MONTH	480	250	310	590	310	385						

DELAWARE RIVER BASIN

01477050 DELAWARE RIVER AT CHESTER, PA--Continued

PH (UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	6.8	6.7	6.8	6.6	6.4	6.5	6.9	6.7	6.8	---	---	---
2	6.9	6.8	6.8	6.6	6.5	6.5	6.9	6.8	6.8	---	---	---
3	6.9	6.5	6.7	6.7	6.5	6.6	6.9	6.7	6.8	---	---	---
4	6.7	6.6	6.6	6.7	6.5	6.5	7.0	6.8	6.9	---	---	---
5	---	---	---	6.7	6.5	6.6	6.9	6.8	6.9	---	---	---
6	---	---	---	6.7	6.5	6.6	6.9	6.8	6.8	---	---	---
7	---	---	---	6.6	6.6	6.6	6.9	6.8	6.8	---	---	---
8	---	---	---	6.7	6.5	6.6	6.9	6.8	6.8	---	---	---
9	6.8	6.6	---	6.7	6.6	6.6	6.8	6.7	6.7	---	---	---
10	6.9	6.7	6.8	6.7	6.7	6.7	6.9	6.7	6.8	---	---	---
11	6.8	6.7	6.7	6.8	6.6	6.7	6.8	6.7	6.8	---	---	---
12	6.7	6.4	6.6	6.7	6.6	6.7	6.8	6.7	6.8	---	---	---
13	6.7	6.6	6.6	6.7	6.6	6.6	6.8	6.7	6.8	---	---	---
14	6.7	6.6	6.6	6.7	6.6	6.7	6.9	6.7	6.8	---	---	---
15	6.7	6.5	6.6	6.7	6.6	6.7	6.8	6.4	6.7	---	---	---
16	8.7	6.6	6.8	6.8	8.7	6.7	6.8	6.7	6.7	---	---	---
17	7.4	6.6	6.7	6.8	6.6	6.7	6.9	6.7	6.7	---	---	---
18	6.6	6.6	6.6	6.8	6.7	6.8	6.8	6.6	6.7	---	---	---
19	6.6	6.5	6.6	6.8	6.7	6.7	6.8	6.7	6.7	---	---	---
20	6.6	6.5	6.5	6.8	6.7	6.7	6.8	6.7	6.8	---	---	---
21	6.5	6.5	6.5	6.7	6.6	6.7	6.9	6.8	6.8	---	---	---
22	6.5	6.5	6.5	6.7	6.6	6.7	6.9	6.8	6.9	---	---	---
23	6.5	6.5	6.5	6.7	6.6	6.6	6.9	6.8	6.9	---	---	---
24	6.5	6.4	6.5	6.7	6.6	6.6	6.9	6.8	6.9	---	---	---
25	6.5	6.4	6.5	6.6	6.6	6.6	6.9	6.8	6.9	---	---	---
26	6.6	6.4	6.5	6.8	6.6	6.7	6.9	6.8	6.8	---	---	---
27	6.6	6.5	6.5	6.8	6.6	6.7	6.9	6.7	6.8	---	---	---
28	6.6	6.5	6.5	6.8	6.6	6.7	7.0	6.8	6.9	6.8	6.7	---
29	6.6	6.5	6.5	6.7	6.6	6.7	---	---	---	7.0	6.7	6.8
30	6.6	6.5	6.5	6.9	6.6	6.8	---	---	---	7.0	6.7	6.8
31	6.6	6.4	6.5	---	---	---	---	---	---	6.9	6.7	6.8
MONTH	8.7	6.4	6.6	6.9	6.4	6.7	7.0	6.4	6.8	7.0	6.7	6.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	6.9	6.8	6.8	6.9	6.8	6.9	6.3	6.1	6.1	---	---	---
2	7.0	6.8	6.9	6.9	6.8	6.9	6.3	6.1	6.2	---	---	---
3	7.1	6.8	6.9	7.1	6.5	6.9	6.2	6.1	---	---	---	---
4	7.1	6.9	7.0	7.2	6.9	7.1	---	---	---	---	---	---
5	7.2	6.9	7.0	7.2	7.1	7.1	---	---	---	---	---	---
6	7.0	7.0	---	7.2	7.1	7.2	---	---	---	---	---	---
7	---	---	---	7.2	7.0	7.1	---	---	---	---	---	---
8	---	---	---	7.1	6.5	6.8	---	---	---	---	---	---
9	---	---	---	6.9	6.6	6.7	---	---	---	---	---	---
10	---	---	---	6.8	6.5	6.7	---	---	---	6.7	6.6	---
11	7.1	6.8	---	6.9	6.6	6.7	---	---	---	6.7	6.6	6.6
12	7.1	6.9	7.0	6.6	6.5	6.6	---	---	---	6.7	6.4	6.6
13	7.1	6.9	7.0	6.8	6.5	6.6	---	---	---	6.7	6.4	6.6
14	7.1	6.9	7.0	6.8	6.6	6.7	---	---	---	6.8	6.5	6.7
15	7.1	6.8	6.9	6.7	6.6	6.7	---	---	---	6.8	6.7	6.7
16	7.1	6.8	6.9	6.7	6.2	6.4	---	---	---	6.8	6.7	6.7
17	7.0	6.8	6.9	6.8	6.3	6.6	---	---	---	6.8	6.6	6.7
18	7.1	6.7	6.9	6.7	6.5	6.6	---	---	---	6.8	6.8	6.8
19	7.1	6.7	6.9	6.8	6.5	6.6	---	---	---	6.8	6.7	6.8
20	7.0	6.7	6.9	6.7	6.5	6.6	---	---	---	6.8	6.6	6.7
21	7.0	6.8	6.9	6.7	6.5	6.6	---	---	---	6.8	6.7	6.7
22	7.0	6.9	6.9	6.7	6.5	6.6	---	---	---	6.8	6.4	6.6
23	7.0	6.9	7.0	6.8	6.6	6.7	---	---	---	6.8	6.4	6.5
24	6.9	6.8	6.9	6.7	6.4	6.6	---	---	---	6.8	6.4	6.7
25	6.8	6.7	6.8	6.6	6.4	6.5	---	---	---	6.8	6.5	6.7
26	6.8	6.7	6.8	6.5	6.4	6.4	---	---	---	6.8	6.7	6.7
27	6.9	6.7	6.8	6.5	6.3	6.4	---	---	---	---	---	---
28	6.9	6.7	6.8	6.4	6.3	6.3	---	---	---	---	---	---
29	6.9	6.7	6.8	6.4	5.9	6.1	---	---	---	---	---	---
30	---	---	---	6.1	5.9	6.0	---	---	---	---	---	---
31	---	---	---	6.2	6.0	6.1	---	---	---	---	---	---
MONTH	7.2	6.7	6.9	7.2	5.9	6.6	6.3	6.1	6.2	6.8	6.4	6.7

01477050 DELAWARE RIVER AT CHESTER, PA--Continued

PH (UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY		JUNE			JULY			AUGUST			SEPTEMBER	
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	6.6	6.5	6.6						
2	---	---	---	6.7	6.6	6.6						
3	---	---	---	6.6	6.6	6.6						
4	---	---	---	6.6	6.5	6.6						
5	---	---	---	6.6	6.5	6.5						
6	---	---	---	6.6	6.5	6.5						
7	---	---	---	8.0	6.4	6.7						
8	---	---	---	6.7	6.4	6.6						
9	---	---	---	6.7	6.6	6.6						
10	---	---	---	6.7	6.6	6.6						
11	7.1	6.7	---	---	---	---						
12	6.7	6.6	6.7	---	---	---						
13	6.7	6.6	6.6	---	---	---						
14	6.7	6.6	6.6	---	---	---						
15	6.6	6.6	6.6	---	---	---						
16	6.6	6.5	6.6	---	---	---						
17	6.7	6.5	6.6	---	---	---						
18	6.6	6.6	6.6	---	---	---						
19	6.6	6.6	6.6	---	---	---						
20	6.6	6.6	6.6	---	---	---						
21	6.6	6.5	6.6	---	---	---						
22	6.6	6.5	6.6	---	---	---						
23	6.6	6.5	6.6	---	---	---						
24	6.6	6.5	6.6	---	---	---						
25	6.6	6.5	6.5	---	---	---						
26	6.6	6.5	6.5	---	---	---						
27	6.5	6.5	6.5	---	---	---						
28	6.5	6.5	6.5	---	---	---						
29	6.5	6.5	6.5	---	---	---						
30	6.6	6.5	6.5	---	---	---						
31	---	---	---	---	---	---						
MONTH	7.1	6.5	6.6	8.0	6.4	6.6						

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	20.5	20.0	20.0	15.0	13.5	14.0	10.5	9.5	10.0	---	---	---
2	21.0	19.5	20.5	15.5	13.5	14.5	10.5	8.5	10.0	---	---	---
3	21.0	20.0	20.5	15.0	13.5	14.0	10.0	8.5	9.5	---	---	---
4	20.5	19.5	20.0	14.5	13.0	13.5	9.5	8.5	9.0	---	---	---
5	---	---	---	14.0	13.0	13.5	9.5	8.5	9.0	---	---	---
6	---	---	---	14.0	13.0	13.5	10.0	8.5	9.0	---	---	---
7	---	---	---	14.0	13.0	13.5	10.0	8.5	9.0	---	---	---
8	---	---	---	14.0	12.5	13.0	9.5	7.5	8.5	---	---	---
9	17.0	16.5	---	14.0	12.5	13.5	8.5	7.0	7.5	---	---	---
10	16.5	14.5	15.5	14.0	13.0	13.5	8.5	7.0	7.5	---	---	---
11	15.0	14.0	14.5	13.0	12.5	13.0	9.0	7.5	8.0	---	---	---
12	15.0	14.0	14.5	13.0	12.0	12.5	9.0	7.5	8.0	---	---	---
13	14.5	13.5	14.0	13.0	12.0	12.5	8.5	7.5	8.0	---	---	---
14	13.5	12.5	13.5	12.5	11.5	12.0	8.0	7.0	7.5	---	---	---
15	14.5	12.5	13.5	12.0	10.5	11.5	7.5	6.5	7.0	---	---	---
16	14.5	13.0	13.5	11.5	10.5	11.0	7.0	6.5	7.0	---	---	---
17	14.0	13.5	14.0	11.5	10.0	10.5	6.5	5.0	6.0	---	---	---
18	15.0	13.5	14.0	11.5	10.0	11.0	5.5	4.5	5.0	---	---	---
19	15.0	13.5	14.0	11.5	10.5	11.0	5.5	4.0	5.0	---	---	---
20	15.0	14.0	14.5	11.5	10.5	11.0	5.0	3.5	4.5	---	---	---
21	15.5	14.0	14.5	11.5	10.5	11.0	5.0	3.5	4.5	---	---	---
22	16.0	14.5	15.0	12.0	11.0	11.5	5.0	4.0	4.5	---	---	---
23	16.5	15.0	15.5	12.5	11.0	11.5	5.5	4.5	5.0	---	---	---
24	15.5	14.5	15.0	13.0	11.0	12.0	6.0	4.5	5.5	---	---	---
25	15.0	14.0	14.5	13.0	11.5	12.5	7.0	5.5	6.0	---	---	---
26	14.5	13.5	14.0	14.5	12.5	13.5	6.5	5.5	6.0	---	---	---
27	14.5	13.5	13.5	14.0	12.0	13.0	6.0	5.0	5.5	---	---	---
28	14.0	13.0	13.5	13.0	12.0	12.5	6.0	4.5	5.5	5.5	4.5	---
29	14.5	13.0	13.5	12.5	11.0	11.5	---	---	---	5.0	4.5	4.5
30	14.0	13.0	13.5	11.0	9.5	10.5	---	---	---	4.5	3.5	4.0
31	14.5	13.0	13.5	---	---	---	---	---	---	4.5	3.0	3.5
MONTH	21.0	12.5	15.0	15.5	9.5	12.5	10.5	3.5	7.0	5.5	3.0	4.0

01477050 DELAWARE RIVER AT CHESTER, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YZAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	4.0	2.5	3.0	4.5	3.0	3.5	10.0	8.0	9.0	15.0	13.5	14.0
2	3.5	2.0	2.5	4.0	2.5	3.0	10.5	9.0	9.5	16.0	14.0	15.0
3	3.5	2.0	2.5	4.0	2.5	3.0	11.0	9.0	9.5	16.0	14.5	15.5
4	3.5	2.0	2.5	4.0	2.5	3.5	10.5	9.0	9.5	16.0	15.0	15.5
5	3.5	2.0	2.5	4.5	3.0	4.0	10.5	9.0	9.5	17.0	15.0	16.0
6	3.0	2.0	---	6.0	3.5	4.5	11.5	9.0	10.0	17.5	15.5	16.5
7	---	---	---	5.5	3.5	4.5	12.0	9.5	10.5	18.0	16.5	17.0
8	---	---	---	6.5	4.5	5.5	12.5	10.5	11.5	17.5	16.5	16.5
9	---	---	---	7.5	5.0	6.0	12.5	11.0	12.0	17.0	16.0	16.5
10	---	---	---	8.0	5.5	6.5	13.5	11.5	12.5	17.5	16.0	16.5
11	3.5	2.5	---	7.5	6.0	7.0	14.0	12.5	13.0	17.5	16.5	17.0
12	3.5	2.5	3.0	7.0	5.5	6.5	14.0	12.5	13.5	18.5	16.5	17.5
13	3.5	2.5	3.0	6.5	5.0	6.0	14.5	13.0	14.0	19.5	17.5	18.5
14	4.0	2.5	3.0	6.5	4.0	5.5	14.0	13.0	13.5	19.5	18.0	19.0
15	4.5	3.0	3.5	6.5	5.0	6.0	14.5	13.5	14.0	19.5	18.0	19.0
16	4.0	3.0	3.5	7.5	5.5	6.5	13.5	12.0	13.0	19.5	18.0	19.0
17	4.0	2.5	3.0	8.5	6.0	7.0	13.5	12.0	12.5	20.0	18.5	19.5
18	3.5	2.5	3.0	9.0	7.0	8.0	14.0	12.5	13.0	19.5	18.5	19.0
19	4.0	2.5	3.0	9.5	7.0	8.0	14.5	12.5	13.5	20.5	19.0	19.5
20	4.5	2.5	3.5	9.5	7.5	8.5	15.0	13.0	14.0	20.5	19.5	20.0
21	5.5	3.0	4.0	10.5	8.0	9.0	15.5	13.5	14.0	20.0	19.0	19.5
22	5.0	3.5	4.5	10.0	8.0	8.5	15.5	13.5	14.0	20.5	19.0	20.0
23	6.0	4.0	5.0	9.5	8.0	9.0	15.0	13.5	14.0	21.5	20.0	20.5
24	6.0	4.5	5.0	9.0	8.0	8.5	15.5	14.0	14.5	21.5	20.5	21.0
25	6.0	4.5	5.5	8.5	7.5	8.0	15.5	14.5	15.0	22.0	20.5	21.0
26	6.0	4.5	5.0	8.0	6.5	7.5	14.5	14.0	14.5	21.0	20.5	20.5
27	5.5	4.5	5.0	8.0	7.0	7.5	14.5	13.5	14.0	---	---	---
28	5.0	4.0	4.5	8.5	7.0	8.0	14.5	13.5	14.0	---	---	---
29	5.0	3.5	4.0	9.0	7.5	8.5	14.0	13.5	14.0	---	---	---
30	---	---	---	9.5	8.0	9.0	14.0	13.5	14.0	---	---	---
31	---	---	---	9.0	8.0	8.5	---	---	---	---	---	---
MONTH	6.0	2.0	3.5	10.5	2.5	6.5	15.5	8.0	12.5	22.0	13.5	18.0

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	26.0	25.0	25.5						
2	---	---	---	27.0	25.0	26.0						
3	---	---	---	26.5	25.5	26.0						
4	---	---	---	27.0	26.0	26.5						
5	---	---	---	27.5	26.0	26.5						
6	---	---	---	27.0	26.0	26.5						
7	---	---	---	26.5	25.5	26.0						
8	---	---	---	26.5	25.5	26.0						
9	---	---	---	27.0	25.5	26.0						
10	---	---	---	26.5	26.0	26.0						
11	22.5	21.5	---	---	---	---						
12	22.5	21.5	22.0	---	---	---						
13	23.0	21.5	22.5	---	---	---						
14	23.5	22.0	22.5	---	---	---						
15	23.5	22.5	23.0	---	---	---						
16	23.0	22.5	23.0	---	---	---						
17	23.5	22.0	23.0	---	---	---						
18	23.5	22.5	22.5	---	---	---						
19	23.5	22.5	23.0	---	---	---						
20	23.0	22.5	22.5	---	---	---						
21	23.0	22.0	22.5	---	---	---						
22	24.0	22.0	23.0	---	---	---						
23	24.5	23.0	23.5	---	---	---						
24	25.0	23.5	24.0	---	---	---						
25	25.5	24.0	24.5	---	---	---						
26	25.5	24.0	25.0	---	---	---						
27	26.0	24.5	25.5	---	---	---						
28	26.0	25.0	25.5	---	---	---						
29	26.5	25.0	25.5	---	---	---						
30	26.0	25.0	25.5	---	---	---						
31	---	---	---	---	---	---						
MONTH	26.5	21.5	23.5	27.5	25.0	26.0						

01477050 DELAWARE RIVER AT CHESTER, PA--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	5.2	3.4	4.3	4.4	4.0	4.2	7.4	6.5	7.0	---	---	---
2	4.9	3.1	3.9	4.7	3.9	4.2	7.7	6.8	7.0	---	---	---
3	5.0	2.9	4.0	5.3	4.2	4.6	7.6	6.9	7.2	---	---	---
4	5.1	3.7	4.5	4.6	4.1	4.3	8.0	7.2	7.5	---	---	---
5	---	---	---	4.4	4.1	4.2	7.8	7.4	7.6	---	---	---
6	---	---	---	4.4	3.9	4.1	7.6	7.3	7.5	---	---	---
7	---	---	---	4.4	3.8	4.0	7.9	7.2	7.4	---	---	---
8	---	---	---	5.1	3.9	4.2	8.5	7.3	7.8	---	---	---
9	6.0	5.5	---	4.8	4.3	4.5	8.6	7.9	8.2	---	---	---
10	6.9	5.9	6.3	5.2	4.4	4.7	8.7	8.1	8.3	---	---	---
11	6.9	6.1	6.6	5.4	4.5	4.8	8.3	8.0	8.1	---	---	---
12	6.8	6.2	6.5	5.9	4.7	5.1	8.5	7.8	8.0	---	---	---
13	6.5	6.0	6.2	5.8	5.1	5.3	8.2	7.7	7.9	---	---	---
14	6.8	6.0	6.3	5.7	5.2	5.4	8.5	7.8	8.0	---	---	---
15	6.7	6.1	6.3	6.3	5.5	5.8	8.3	7.8	7.9	---	---	---
16	6.4	5.9	6.1	6.6	6.0	6.3	8.0	7.7	7.8	---	---	---
17	6.0	5.6	5.8	6.9	6.1	6.5	9.0	7.7	8.2	---	---	---
18	5.7	5.3	5.5	6.7	6.2	6.4	9.1	8.0	8.5	---	---	---
19	5.6	5.0	5.2	6.3	5.9	6.1	9.2	8.2	8.6	---	---	---
20	5.1	4.7	4.9	6.3	5.6	5.8	9.5	8.5	8.9	---	---	---
21	5.0	4.3	4.6	6.0	5.3	5.5	9.6	8.9	9.0	---	---	---
22	4.6	3.8	4.3	5.6	5.2	5.3	9.1	8.7	8.9	---	---	---
23	4.4	3.8	4.1	5.6	4.9	5.1	9.1	8.4	8.6	---	---	---
24	4.7	4.1	4.4	5.4	4.7	4.9	8.5	8.2	8.3	---	---	---
25	4.8	4.4	4.6	5.0	4.6	4.8	8.7	8.2	8.5	---	---	---
26	5.1	4.6	4.8	7.0	4.7	5.6	8.6	8.3	8.4	---	---	---
27	5.0	4.5	4.8	7.1	5.6	6.0	9.1	8.2	8.6	---	---	---
28	5.0	4.4	4.8	6.5	5.6	5.9	9.6	8.5	9.0	7.3	6.1	---
29	4.7	4.2	4.5	6.2	5.6	5.9	---	---	---	6.7	6.0	6.3
30	4.7	4.0	4.4	7.3	6.0	6.6	---	---	---	7.2	6.1	6.6
31	4.5	4.0	4.3	---	---	---	---	---	---	7.4	6.3	6.7
MONTH	6.9	2.9	5.1	7.3	3.8	5.2	9.6	6.5	8.1	7.4	6.0	6.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	7.8	6.5	7.1	---	---	---	10.0	8.5	9.4	---	---	---
2	8.2	7.2	7.7	---	---	---	9.4	8.1	8.9	---	---	---
3	8.5	7.6	8.0	---	---	---	9.0	8.1	---	---	---	---
4	8.5	7.9	8.2	---	---	---	---	---	---	---	---	---
5	8.4	7.9	8.2	---	---	---	---	---	---	---	---	---
6	8.2	7.9	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	8.5	7.9	---	---	---	---	---	---	---	---	---	---
12	8.5	7.7	7.9	---	---	---	---	---	---	---	---	---
13	8.2	7.5	7.8	---	---	---	---	---	---	---	---	---
14	7.9	7.2	7.6	---	---	---	---	---	---	6.2	5.7	---
15	7.5	6.7	7.0	---	---	---	8.5	7.1	---	6.3	5.8	6.1
16	7.6	6.3	6.9	---	---	---	7.3	6.8	7.1	6.3	5.9	6.1
17	7.1	6.6	6.8	---	---	---	8.9	7.2	8.1	6.2	5.4	5.9
18	7.2	5.5	6.8	---	---	---	8.9	7.9	8.3	6.0	5.7	5.9
19	7.1	6.4	6.8	---	---	---	9.1	7.7	8.3	6.1	5.3	5.7
20	6.8	6.0	6.4	---	---	---	8.6	7.4	8.2	6.0	5.7	5.8
21	6.8	5.5	6.1	---	---	---	8.8	7.6	8.1	6.4	5.9	6.0
22	6.6	5.5	6.0	---	---	---	---	---	---	6.6	5.9	6.2
23	6.4	5.4	5.8	---	---	---	---	---	---	6.8	6.1	6.3
24	5.9	4.9	5.3	---	---	---	---	---	---	6.5	5.7	6.1
25	5.5	4.3	4.9	---	---	---	---	---	---	6.7	5.8	6.1
26	5.4	4.2	5.0	---	---	---	---	---	---	6.6	6.2	6.3
27	6.3	4.8	5.6	---	---	---	---	---	---	---	---	---
28	6.5	5.6	5.8	---	---	---	---	---	---	---	---	---
29	6.1	5.4	5.7	10.7	9.0	---	---	---	---	---	---	---
30	---	---	---	10.6	9.4	10.1	---	---	---	---	---	---
31	---	---	---	10.1	8.9	9.5	---	---	---	---	---	---
MONTH	8.5	4.2	6.7	10.7	8.9	9.8	10.0	6.8	8.3	6.8	5.3	6.0

01477050 DELAWARE RIVER AT CHESTER, PA--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	3.7	3.3	3.5						
2	---	---	---	3.6	3.3	3.4						
3	---	---	---	3.5	3.2	3.3						
4	---	---	---	3.6	3.2	3.3						
5	---	---	---	3.7	3.3	3.4						
6	---	---	---	3.9	3.3	3.6						
7	---	---	---	4.1	3.7	3.9						
8	---	---	---	4.2	3.4	3.7						
9	---	---	---	3.7	3.3	3.5						
10	---	---	---	3.5	3.4	3.4						
11	4.9	4.0	---	---	---	---						
12	5.1	4.7	4.9	---	---	---						
13	5.1	4.6	4.9	---	---	---						
14	5.1	4.6	4.9	---	---	---						
15	4.9	4.6	4.8	---	---	---						
16	4.8	4.5	4.7	---	---	---						
17	4.8	4.3	4.6	---	---	---						
18	4.6	4.3	4.5	---	---	---						
19	4.6	4.3	4.5	---	---	---						
20	4.6	4.3	4.5	---	---	---						
21	4.8	4.4	4.6	---	---	---						
22	4.9	4.5	4.6	---	---	---						
23	4.8	4.4	4.5	---	---	---						
24	4.5	4.3	4.4	---	---	---						
25	4.4	4.1	4.3	---	---	---						
26	4.3	3.8	4.0	---	---	---						
27	4.1	3.7	3.9	---	---	---						
28	3.9	3.6	3.8	---	---	---						
29	3.8	3.5	3.7	---	---	---						
30	3.7	3.4	3.5	---	---	---						
31	---	---	---	---	---	---						
MONTH	5.1	3.4	4.4	4.2	3.2	3.5						

01480300 WEST BRANCH BRANDYWINE CREEK NEAR HONEY BROOK, PA

LOCATION.--Lat 40°04'22", long 75°51'40", Chester County, Hydrologic Unit 02040205, at right upstream end of bridge on Legislative Route 15185, at Birdell, 0.4 mi (0.6 km) downstream from Two Log Run, and 3.0 mi (4.8 km) southeast of Honey Brook.

DRAINAGE AREA.--18.7 mi^2 (48.4 km^2).

PERIOD OF RECORD.--June 1960 to current year.

REVISED RECORDS.--WDR PA-73: 1972(P).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 591.20 ft (180.198 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--20 years, 26.3 ft^3/s (0.745 m^3/s), 19.12 in/yr (486 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,140 ft^3/s (231 m^3/s) June 22, 1972, gage height, 11.41 ft (3.478 m), from rating curve extended above 1,900 ft^3/s (53.8 m^3/s) on basis of slope-area measurement of peak flow; minimum, 1.7 ft^3/s (0.048 m^3/s) Aug. 15, 16, 17, 18, 19, 1963; minimum gage height, 1.07 ft (0.326 m) Feb. 21, 22, 1977, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 731 ft^3/s (20.7 m^3/s) March 21, gage height, 6.47 ft (1.972 m); minimum, 4.6 ft^3/s (0.13 m^3/s) Sept. 11, gage height, 1.09 ft (0.332 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	121	22	20	21	15	14	146	150	25	15	12	6.2
2	38	23	19	22	15	15	59	50	20	14	9.8	5.8
3	34	121	18	20	16	17	41	45	20	14	10	6.2
4	23	39	18	20	16	15	71	35	19	13	9.8	5.8
5	94	29	18	20	16	22	38	30	17	13	11	6.2
6	56	27	19	19	16	20	30	30	17	13	11	9.8
7	26	26	21	20	15	18	28	30	18	12	9.0	7.0
8	24	24	17	19	16	21	27	37	30	12	9.0	6.6
9	38	23	16	19	15	27	59	29	20	12	8.2	5.8
10	302	42	17	21	15	20	80	26	26	11	8.2	5.8
11	68	42	16	59	17	26	35	27	18	12	10	5.4
12	50	60	16	102	15	18	29	81	17	11	9.8	5.4
13	46	34	29	27	15	18	27	167	16	11	9.0	5.4
14	31	38	26	27	15	45	39	42	16	11	7.8	5.8
15	28	30	18	29	16	31	84	31	16	10	8.2	6.6
16	27	27	18	25	18	41	36	26	38	17	7.8	5.8
17	25	25	18	22	15	146	29	23	18	17	7.4	6.2
18	25	25	15	27	17	168	27	39	17	12	7.8	6.6
19	24	25	16	52	15	38	25	43	16	11	7.8	6.2
20	23	23	16	27	16	30	25	44	15	11	7.8	5.8
21	23	23	16	24	17	276	24	71	14	11	7.0	5.8
22	23	21	18	24	22	80	22	39	14	11	7.0	6.2
23	24	21	21	26	26	36	22	27	14	13	7.4	5.8
24	53	20	22	19	21	35	22	24	13	11	7.0	5.8
25	28	20	70	20	20	72	22	23	13	10	7.4	6.6
26	25	60	32	19	18	36	21	20	13	9.8	6.6	13
27	23	39	27	18	17	29	53	20	16	9.8	6.6	6.2
28	28	26	24	20	16	27	130	19	13	9.8	5.8	5.8
29	28	22	23	18	15	74	100	19	23	9.8	7.0	6.2
30	24	21	22	17	---	42	70	19	41	9.4	6.2	5.8
31	21	---	22	16	---	143	---	20	---	9.0	7.0	---
TOTAL	1403	978	668	819	486	1600	1421	1286	573	365.6	256.4	191.6
MEAN	45.3	32.6	21.5	26.4	16.8	51.6	47.4	41.5	19.1	11.8	8.27	6.39
MAX	302	121	70	102	26	276	146	167	41	17	12	13
MIN	21	20	15	16	15	14	21	19	13	9.0	5.8	5.4
CFSM	2.42	1.74	1.15	1.41	.90	2.76	2.54	2.22	1.02	.63	.44	.34
IN.	2.79	1.95	1.33	1.63	.97	3.18	2.83	2.56	1.14	.73	.51	.38

CAL YR 1979 TOTAL 16759.0 MEAN 45.9 MAX 980 MIN 11 CFSM 2.46 IN 33.34
WTR YR 1980 TOTAL 10047.6 MEAN 27.5 MAX 302 MIN 5.4 CFSM 1.47 IN 19.99

01480500 WEST BRANCH BRANDYWINE CREEK AT COATESVILLE, PA

LOCATION.--Lat 39°59'08", long 75°49'40", Chester County, Hydrologic Unit 02040205, on right bank at city limits of Coatesville, 1,200 ft (366 m) upstream from bridge on old Lincoln Highway, and 0.6 mi (1.0 km) downstream from Rock Run.

DRAINAGE AREA.--45.8 mi² (118.6 km²).

PERIOD OF RECORD.--October 1943 to December 1951, January 1970 to current year.

GAGE.--Water-stage recorder and V-notch sharp crested weir. Altitude of gage is 305 ft (93.0 m), from topographic map. Sept. 10, 1943, to Dec. 31, 1951, nonrecording gage at site 1,100 ft (335 m) downstream at different datum.

REMARKS.--Records good. Diversion above station from Rock Run Reservoir, capacity, 320 mil gal (1.211 hm³) 2.6 mi (4.2 km) upstream, for municipal supply of city of Coatesville.

AVERAGE DISCHARGE.--18 years (1943-51, 1970-80), 75.3 ft³/s (2.132 m³/s), 22.32 in/yr (567 mm/yr), adjusted for storage and diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,100 ft³/s (229 m³/s) June 29, 1973, gage height, 10.08 ft (3.072 m), from rating curve extended above 2,200 ft³/s (62.3 m³/s) on basis of slope-area measurement at gage height 9.92 ft (3.024 m); minimum observed, 4.6 ft³/s (0.13 m³/s) Sept. 10, 1944, gage height, 0.70 ft (0.213 m), site and datum then in use; minimum daily, 9.6 ft³/s (0.27 m³/s) Sept. 12, 1949.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 9, 1942 reached a stage of 12.3 ft (3.75 m), site and datum then in use, discharge, 8,600 ft³/s (244 m³/s), by slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 795 ft³/s (22.5 m³/s) March 21, gage height, 5.65 ft (1.722 m); minimum, 8.3 ft³/s (0.24 m³/s) Sept. 24, 25, gage height, 3.35 ft (1.021 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	222	67	61	47	34	31	348	403	75	54	43	14
2	142	67	61	47	38	36	178	148	70	50	29	12
3	152	246	59	46	36	34	117	132	64	50	30	11
4	81	104	61	46	38	37	167	99	62	50	25	11
5	180	75	61	46	38	45	113	87	59	49	22	12
6	187	72	62	44	38	49	90	79	59	49	40	19
7	84	72	64	46	39	42	83	79	61	42	24	15
8	75	70	61	45	39	49	78	110	72	43	20	11
9	86	70	57	44	39	61	130	82	62	45	20	11
10	530	104	59	42	39	48	167	72	70	43	19	11
11	218	101	59	120	37	61	96	72	61	40	27	11
12	139	145	59	223	39	44	81	174	57	38	30	9.7
13	135	86	70	66	37	50	75	297	56	33	21	9.7
14	98	86	72	59	37	126	88	111	56	32	19	9.9
15	86	75	61	61	39	85	153	81	61	32	19	11
16	81	72	61	55	46	92	90	73	101	84	20	11
17	78	70	61	52	41	180	73	66	61	70	17	10
18	75	70	56	58	36	322	69	96	57	50	16	13
19	75	70	57	109	38	95	64	152	56	42	19	12
20	72	67	57	61	38	70	62	143	56	37	17	11
21	72	67	57	54	41	402	60	155	52	34	17	11
22	70	64	59	53	50	256	59	108	50	39	14	12
23	72	64	61	57	59	95	57	78	50	50	14	11
24	135	64	62	48	52	83	57	72	50	42	14	9.7
25	75	64	225	47	47	152	57	72	50	32	14	11
26	72	152	90	46	44	88	56	67	49	29	14	29
27	70	119	60	45	41	71	95	64	50	28	13	17
28	72	75	55	46	39	64	316	62	49	26	13	11
29	75	67	52	45	35	161	293	62	61	28	13	11
30	70	62	50	40	---	107	188	62	95	26	13	12
31	67	---	49	41	---	332	---	70	---	26	23	---
TOTAL	3646	2587	2039	1839	1174	3368	3560	3428	1832	1293	639	370.0
MEAN	118	86.2	65.8	59.3	40.5	109	119	111	61.1	41.7	20.6	12.3
MAX	530	246	225	223	59	402	348	403	101	84	43	29
MIN	67	62	49	40	34	31	56	62	49	26	13	9.7
‡	+6.08	+5.78	+5.40	+5.79	+5.89	+5.33	+5.47	+4.85	+5.45	+5.10	+5.45	+5.69
MEAN†	124	92.0	71.2	65.1	46.4	114	124	115	66.5	46.8	26.1	18.0
CFSM†	2.70	2.01	1.55	1.42	1.01	2.49	2.71	2.52	1.45	1.02	.57	.39
IN.†	3.11	2.24	1.79	1.64	1.09	2.87	3.02	2.91	1.62	1.18	.66	.44

CAL YR 1979 TOTAL 38855.0 MEAN 106 MAX 1700 MIN 26 MEAN† 112 CFSM† 2.44 IN.† 33.08
WTR YR 1980 TOTAL 25775.0 MEAN 70.4 MAX 530 MIN 9.7 MEAN† 75.9 CFSM† 1.66 IN.† 22.58

‡ Diversion for municipal supply and change in contents in Rock Run Reservoir, equivalent in cubic feet per second, furnished by the City of Coatesville.

† Adjusted for diversion and change in contents in Rock Run Reservoir.

01480617 WEST BRANCH BRANDYWINE CREEK AT MODENA, PA

LOCATION.--Lat 39°57'42", long 75°48'06", Chester County, Hydrologic Unit 02040205, on left bank at bridge on Legislative Route 15068 at Modena and 300 ft (91 m) upstream from Dennis Run.

DRAINAGE AREA.--55.0 mi^2 (142.4 km^2).

PERIOD OF RECORD.--January 1970 to current year.

REVISED RECORDS.--WDR PA-74: 1971-72(P), 1973. WDR PA-75-1: 1974(m).

GAGE.--Water-stage recorder. Altitude of gage is 265 ft (80.8 m), from topographic map.

REMARKS.--Records fair. Flow regulated by Rock Run Reservoir, capacity, 320 mil gal (1.211 hm^3) 5.6 mi (9.0 km) upstream and by Lukens Steel Company. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--10 years, 105 ft^3/s (2.974 m^3/s), 25.91 inyr (658 mm/yr), adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,600 ft^3/s (272 m^3/s) June 29, 1973, gage height, 12.47 ft (3.081 m), from rating curve extended above 920 ft^3/s (26.1 m^3/s) on basis of slope-area measurement at gage height 11.48 ft (3.499 m); minimum, 1.8 ft^3/s (0.051 m^3/s) Aug. 29, 1974; minimum gage height, 2.27 ft (0.692 m) Oct. 14, 1970.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 890 ft^3/s (25.2 m^3/s) July 16, gage height, 5.05 ft (1.539 m); minimum, 2.6 ft^3/s (0.074 m^3/s) Sept. 24, gage height, 2.44 ft (0.744 m), but may have been less during period of missing record Sept. 12-22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	230	86	86	78	53	50	418	450	97	55	43	28
2	161	90	84	80	58	55	224	185	80	47	33	25
3	171	273	82	78	55	45	150	166	78	46	38	26
4	100	136	84	74	58	50	213	126	60	47	33	22
5	200	105	82	78	58	60	140	107	58	46	34	25
6	207	101	93	74	58	80	114	101	57	46	38	29
7	111	97	99	82	58	68	101	99	60	41	32	26
8	99	95	95	81	55	93	95	140	88	41	30	25
9	118	95	86	80	60	114	158	107	74	43	30	21
10	605	133	88	75	60	90	200	93	80	43	30	24
11	250	131	88	150	55	114	120	97	64	40	38	19
12	174	171	90	230	58	78	100	216	57	37	38	17
13	169	116	107	124	53	97	95	362	50	38	33	17
14	133	114	114	109	58	224	110	138	52	38	32	18
15	124	103	93	105	58	152	180	101	60	38	30	25
16	116	101	90	92	82	155	120	93	129	118	32	20
17	114	97	90	84	66	273	100	86	68	82	30	18
18	111	93	78	99	58	406	88	122	52	47	30	30
19	103	93	82	166	58	131	84	177	57	38	30	20
20	105	90	86	105	58	101	78	177	50	41	30	18
21	101	88	82	92	65	455	74	185	50	37	25	20
22	99	88	86	88	80	314	68	131	46	47	28	30
23	105	86	93	94	100	111	66	101	47	50	30	20
24	166	84	99	84	90	99	68	88	43	43	26	19
25	107	82	270	82	80	182	66	86	47	35	27	26
26	99	177	129	80	70	105	66	74	43	34	26	33
27	95	142	99	76	65	86	136	72	46	35	25	24
28	103	101	93	76	60	80	382	66	47	34	27	19
29	103	93	86	74	55	198	347	66	78	37	27	20
30	93	88	84	60	---	131	240	64	126	32	28	17
31	86	---	82	64	---	410	---	88	---	33	44	---
TOTAL	4558	3349	3000	2914	1842	4607	4401	4164	1944	1389	977	681
MEAN	147	112	96.8	94.0	63.5	149	147	134	64.8	44.8	31.5	22.7
MAX	605	273	270	230	100	455	418	450	129	118	44	33
MIN	86	82	78	60	53	45	66	64	43	32	25	17
‡	+.49	+.20	-.40	+.28	+.19	+.04	+.46	-.42	+.17	-.35	-.30	-.06
MEAN†	148	112	96.4	94.3	63.7	149	147	134	65.0	44.5	31.2	22.6
CFSM†	2.68	2.03	1.75	1.71	1.16	2.70	2.68	2.43	1.18	.81	.57	.41
IN.†	3.09	2.27	2.02	1.98	1.25	3.12	2.99	2.81	1.32	.93	.65	.46

CAL YR 1979 TOTAL 51965 MEAN 142 MAX 2220 MIN 43 MEAN† 142 CFSM† 2.59 IN.† 35.14
WTR YR 1980 TOTAL 33826 MEAN 92.4 MAX 605 MIN 17 MEAN† 92.4 CFSM† 1.68 IN.† 22.88

‡ Change in contents in Rock Run Reservoir, equivalent in cubic feet per second, furnished by the City of Coatesville.

† Adjusted for change in contents in Rock Run Reservoir.

01480675 MARSH CREEK NEAR GLENMOORE, PA

LOCATION.--Lat 40°05'52", long 75°44'31", Chester County, Hydrologic Unit 02040205, on left bank, 200 ft (60 m) north of Pennsylvania Turnpike, 1.2 mi (1.9 km) downstream from Lyons Run, 1.8 mi (2.9 km) upstream from Black Horse Creek, and 3 mi (5 km) northeast of Glenmoore.

DRAINAGE AREA.--8.57 mi^2 (22.20 km^2).

PERIOD OF RECORD.--July 1966 to current year.

REVISED RECORDS.--WDR PA-74: 1967(M), 1971-72(P).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 450 ft (137 m), from topographic map.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--14 years, 13.3 ft^3/s (0.377 m^3/s), 21.13 in/yr (537 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 946 ft^3/s (26.8 m^3/s) June 22, 1972, gage height, 4.68 ft (1.426 m); minimum, 0.3 ft^3/s (0.008 m^3/s) Aug. 31, 1966, gage height, 0.98 ft (0.299 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 148 ft^3/s (4.19 m^3/s) March 21, gage height, 2.41 ft (0.735 m); minimum, 0.60 ft^3/s (0.017 m^3/s) Sept. 13, 14, gage height, 1.11 ft (0.338 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	11	11	8.7	5.1	5.1	62	61	11	7.3	2.3	.98
2	39	12	11	8.7	4.9	5.0	33	32	10	4.6	1.9	.90
3	29	40	9.4	8.7	4.8	5.1	24	22	9.5	3.9	2.3	.90
4	22	36	11	8.0	4.7	5.3	33	20	8.1	3.6	1.9	.78
5	20	17	10	8.0	4.5	7.7	24	17	6.7	3.6	2.1	.68
6	31	14	11	8.0	4.5	9.7	20	16	6.2	4.3	2.1	.78
7	19	13	14	8.0	4.5	8.8	17	15	6.9	3.5	1.8	.78
8	14	12	12	8.0	4.5	12	17	22	9.6	3.0	1.5	.75
9	15	12	9.9	8.0	4.5	21	41	19	9.6	3.2	1.3	.75
10	60	19	9.9	7.4	4.5	14	36	15	11	2.5	1.2	.75
11	62	23	9.9	19	4.5	17	21	15	8.7	2.6	1.5	.68
12	28	28	9.9	58	4.5	10	18	21	6.9	3.0	1.9	.65
13	25	20	15	20	4.5	9.5	18	47	5.9	2.5	1.8	.62
14	19	17	20	14	4.5	17	24	29	5.4	2.3	1.6	.65
15	16	15	12	15	4.5	20	24	17	5.5	2.3	1.5	1.2
16	14	14	10	13	5.0	23	18	13	11	2.1	1.5	.90
17	14	13	11	11	4.7	33	16	12	8.4	2.2	1.3	.82
18	14	13	8.4	14	4.5	71	15	17	5.9	3.0	1.2	1.1
19	13	12	7.7	28	4.5	29	14	18	5.1	2.5	1.2	.94
20	13	12	8.4	17	4.5	17	14	15	4.9	2.3	1.2	.98
21	13	12	8.7	12	5.0	84	13	22	4.6	2.2	1.1	.98
22	12	11	9.9	11	7.0	80	12	20	4.3	2.2	1.1	.82
23	13	11	13	12	10	25	12	13	4.0	2.5	1.1	.75
24	27	11	16	9.0	8.0	22	12	11	3.8	2.6	1.3	.68
25	20	11	40	8.3	6.0	32	12	10	3.8	2.3	1.1	.90
26	14	32	32	8.2	5.5	22	14	9.1	3.7	2.2	.94	1.9
27	12	42	14	7.7	5.0	17	25	8.2	3.5	2.6	.90	1.1
28	13	17	11	8.5	4.5	17	68	7.7	3.4	2.5	.90	.98
29	16	13	10	8.3	4.5	36	63	7.5	5.0	1.9	.94	.90
30	13	11	9.9	6.5	---	27	36	7.4	11	1.7	.98	.82
31	12	---	9.5	6.2	---	62	---	8.6	---	1.5	.98	---
TOTAL	657	524	395.5	388.2	147.7	764.2	756	567.5	203.4	88.5	44.44	26.42
MEAN	21.2	17.5	12.8	12.5	5.09	24.7	25.2	18.3	6.78	2.85	1.43	.88
MAX	62	42	40	58	10	84	68	61	11	7.3	2.3	1.9
MIN	12	11	7.7	6.2	4.5	5.0	12	7.4	3.4	1.5	.90	.62
CFSM	2.47	2.04	1.49	1.46	.59	2.88	2.94	2.14	.79	.33	.17	.10
IN.	2.85	2.27	1.72	1.68	.64	3.32	3.28	2.46	.88	.38	.19	.11

CAL YR 1979 TOTAL 6379.60 MEAN 17.5 MAX 213 MIN 2.9 CFSM 2.04 IN 27.69
WTR YR 1980 TOTAL 4562.86 MEAN 12.5 MAX 84 MIN .62 CFSM 1.46 IN 19.80

01480685 MARSH CREEK NEAR DOWNINGTOWN, PA

LOCATION.--Lat 40°03'19", long 75°43'00", Chester County, Hydrologic Unit 02040205, on left bank 1,000 ft (305 m) downstream from Marsh Creek Dam, 0.2 mi (0.3 km) upstream from mouth and 3.0 mi (4.8 km) north of Downingtown.

DRAINAGE AREA.--20.3 mi^2 (52.6 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1973 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 280 ft (85 m), from topographic map.

REMARKS.--Records good. Flow completely regulated since November 1973 by Marsh Creek Reservoir (station 01480684) 1,000 ft (305 m) upstream.

AVERAGE DISCHARGE.--7 years, 35.1 ft^3/s (0.994 m^3/s), 23.50 in/yr (597 mm/yr), adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 544 ft^3/s (15.4 m^3/s) Jan. 26, 1979, gage height, 3.66 ft (1.116 m), from rating curve extended above 200 ft^3/s (5.7 m^3/s); minimum daily, 0.31 ft^3/s (0.009 m^3/s) Dec. 22, 23, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 134 ft^3/s (3.79 m^3/s) May 1, gage height, 2.72 ft (0.829 m); minimum, 0.34 ft^3/s (0.010 m^3/s) Feb. 23, March 1, gage height, 0.95 ft (0.290 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	28	29	58	20	.37	95	108	33	16	12	4.0
2	34	28	29	58	18	.40	115	124	33	16	12	4.0
3	44	41	43	58	15	.40	104	108	32	15	12	4.2
4	48	48	71	58	14	.40	98	97	30	15	12	6.8
5	48	47	63	58	13	1.5	95	87	28	15	12	10
6	48	44	61	58	13	3.3	87	79	26	15	12	3.6
7	47	41	61	58	13	3.3	81	70	25	14	12	3.4
8	43	37	61	58	13	3.4	76	28	26	13	12	7.8
9	40	34	61	58	13	3.4	74	31	25	13	12	12
10	66	37	61	58	13	3.4	77	33	26	13	12	17
11	95	41	61	41	13	3.3	77	34	25	13	12	24
12	120	46	61	12	13	3.3	73	40	24	13	8.8	9.1
13	108	47	61	12	13	3.3	70	55	23	12	4.4	5.4
14	97	51	61	12	13	3.7	67	59	22	12	4.4	11
15	85	57	61	13	13	3.4	68	57	21	12	4.4	8.8
16	79	53	61	15	13	3.4	67	53	24	12	4.5	3.6
17	71	47	58	16	13	3.4	65	48	23	12	4.5	3.0
18	47	44	58	18	13	4.9	35	48	22	12	4.5	3.0
19	16	41	58	22	13	7.3	9.1	50	21	12	4.5	3.0
20	18	39	58	29	13	11	12	55	19	12	4.5	3.0
21	19	37	58	29	13	28	14	56	18	12	4.5	4.7
22	21	34	58	29	6.8	67	14	56	17	12	4.5	10
23	22	33	58	37	.44	93	15	53	17	12	4.5	11
24	28	32	58	46	.49	106	17	49	16	12	4.5	6.0
25	30	31	58	46	.49	100	25	46	16	12	4.5	3.1
26	30	37	58	46	.44	93	32	43	15	12	4.5	3.1
27	29	53	58	37	.44	84	35	38	15	12	4.7	3.1
28	29	53	58	27	.40	77	56	35	14	12	4.5	3.2
29	30	48	58	25	.40	76	76	33	14	12	7.2	6.8
30	29	40	58	21	---	56	81	31	17	12	10	11
31	29	---	58	20	---	37	---	31	---	12	4.9	---
TOTAL	1479	1249	1776	1133	297.90	883.87	1810.1	1735	667	399	234.8	208.7
MEAN	47.7	41.6	57.3	36.5	10.3	28.5	60.3	56.0	22.2	12.9	7.57	6.96
MAX	120	57	71	58	20	106	115	124	33	16	12	24
MIN	16	28	29	12	.40	.37	9.1	28	14	12	4.4	3.0
MEAN≠	50.5	41.0	29.3	30.0	19.4	60.2	61.7	47.7	19.7	8.64	4.81	1.75
CFSM≠	2.49	2.02	1.44	1.48	.95	2.97	3.04	2.35	.97	.43	.24	.09
IN.≠	2.87	2.25	1.67	1.71	1.03	3.42	3.39	2.71	1.08	.49	.27	.10

CAL YR 1979 TOTAL 18312.00 MEAN 50.2 MAX 418 MIN 11 MEAN≠ 49.7 CFSM≠ 2.45 IN.≠ 33.26
WTR YR 1980 TOTAL 11873.37 MEAN 32.4 MAX 124 MIN .37 MEAN≠ 31.3 CFSM≠ 1.54 IN.≠ 21.02

≠ Adjusted for change in contents in Marsh Creek Reservoir.

01480685 MARSH CREEK NEAR DOWNINGTOWN, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1973 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 31.5°C Aug. 2, 1975, July 19, 1977; minimum, freezing point February 3, 1980.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 27.0°C Sept. 6; minimum, freezing point February 3, 1980.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	19.5	16.5	18.5	12.5	11.5	12.0	9.5	9.0	9.0	4.5	4.0	4.5
2	19.5	19.0	19.0	12.5	12.0	12.0	9.0	8.0	8.5	4.0	4.0	4.0
3	20.0	18.5	19.0	12.5	12.0	12.5	9.0	7.5	8.0	4.0	4.0	4.0
4	19.5	18.5	19.0	12.5	11.5	12.0	8.5	8.0	8.5	4.0	3.5	4.0
5	19.0	18.0	18.5	12.5	11.5	12.0	8.5	8.0	8.0	4.0	3.0	3.5
6	18.5	17.5	18.0	12.0	11.0	11.5	8.0	7.5	7.5	3.0	2.5	3.0
7	18.0	17.0	17.5	12.0	11.0	11.5	8.0	7.5	7.5	3.5	3.0	3.0
8	17.0	16.5	17.0	11.5	11.0	11.0	8.0	7.0	7.5	3.5	2.5	3.0
9	17.0	16.0	16.5	11.5	11.0	11.0	7.5	7.0	7.0	3.0	2.5	2.5
10	16.0	15.0	15.5	12.0	11.5	11.5	7.5	7.0	7.0	2.5	2.5	2.5
11	15.5	14.5	15.5	12.0	11.0	11.5	7.5	7.0	7.0	5.0	2.0	3.0
12	14.5	14.5	14.5	11.5	11.0	11.0	7.0	7.0	7.0	3.5	2.0	2.5
13	14.5	14.0	14.0	11.0	11.0	11.0	7.5	7.0	7.0	3.0	2.0	2.5
14	14.0	13.0	13.5	11.0	10.5	11.0	7.0	7.0	7.0	3.5	2.5	3.0
15	14.0	13.0	13.5	10.5	10.0	10.5	7.0	6.5	6.5	4.5	2.5	3.5
16	13.5	13.0	13.0	10.5	9.5	10.0	7.0	6.5	7.0	4.0	2.5	3.0
17	13.0	13.0	13.0	10.5	9.5	10.0	7.0	5.5	6.0	4.5	2.5	3.5
18	14.5	13.0	13.0	11.0	9.5	10.0	5.5	5.5	5.5	4.0	3.5	3.5
19	14.5	13.0	13.5	10.5	9.5	10.0	5.5	5.0	5.5	4.0	3.0	3.5
20	14.5	13.0	13.5	10.5	9.5	10.0	5.0	5.0	5.0	4.0	3.0	3.0
21	16.0	13.5	14.5	10.5	9.5	9.5	5.0	4.5	5.0	3.5	2.5	3.0
22	16.0	14.0	14.5	10.5	9.5	10.0	5.0	5.0	5.0	3.0	3.0	3.0
23	15.0	13.5	14.5	10.5	9.5	10.0	5.0	5.0	5.0	3.0	2.5	3.0
24	15.0	14.0	14.5	10.5	9.5	10.0	5.0	5.0	5.0	2.5	2.0	2.5
25	14.0	13.5	14.0	11.0	10.0	10.5	5.5	5.0	5.0	2.5	2.0	2.0
26	13.5	12.5	13.0	12.0	10.0	11.0	5.0	4.5	5.0	2.5	2.0	2.0
27	13.0	12.5	12.5	11.5	10.5	11.0	5.0	4.5	5.0	4.0	1.5	2.0
28	12.5	12.5	12.5	11.5	10.5	11.0	5.0	4.5	4.5	2.5	2.0	2.0
29	13.0	12.0	12.5	10.5	9.5	10.0	5.0	4.0	4.5	4.0	1.5	2.0
30	13.0	12.0	12.5	10.5	9.0	9.5	5.0	4.0	4.5	2.5	1.5	1.5
31	13.0	12.0	12.0	---	---	---	5.0	4.0	4.5	2.0	1.0	1.5
MONTH	20.0	12.0	15.0	12.5	9.0	11.0	9.5	4.0	6.5	5.0	1.0	3.0

01480685 MARSH CREEK NEAR DOWNINGTOWN, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.0	.5	1.0	3.0	2.0	2.0	7.5	6.5	7.0	13.5	12.5	13.0
2	2.0	.5	.5	2.0	1.0	1.5	8.0	7.0	7.0	14.0	12.5	13.0
3	2.5	.0	1.0	2.0	.5	1.5	9.0	7.0	7.5	14.5	13.0	13.5
4	2.0	1.0	1.5	2.0	.5	1.0	9.0	7.0	8.0	16.0	13.0	14.5
5	2.5	1.5	2.0	5.0	.5	2.0	9.0	8.0	8.5	15.0	13.0	14.0
6	---	---	---	6.0	2.5	4.0	9.5	7.5	8.5	15.5	13.5	14.0
7	---	---	---	5.5	3.5	4.0	8.5	7.5	8.0	15.5	12.5	14.0
8	---	---	---	7.5	3.5	5.0	9.0	7.5	8.5	16.0	14.5	15.0
9	---	---	---	7.0	3.5	5.0	9.0	8.0	8.5	17.0	14.0	15.5
10	---	---	---	7.5	3.5	5.0	12.0	9.0	10.5	16.5	14.0	15.0
11	---	---	---	6.5	4.0	5.0	12.5	10.0	11.0	15.5	14.5	15.0
12	---	---	---	6.0	3.5	4.5	11.0	9.5	10.0	16.5	14.5	15.5
13	---	---	---	4.0	2.5	3.0	12.5	10.5	11.5	18.0	15.5	16.5
14	3.5	2.0	2.5	4.0	3.0	3.5	11.5	10.5	11.0	18.5	17.0	17.5
15	3.5	2.0	2.5	6.5	3.0	4.5	12.5	10.0	11.5	18.5	16.0	17.0
16	2.5	2.0	2.5	7.0	3.5	4.5	11.5	10.5	11.0	19.0	16.0	17.5
17	4.0	2.0	2.5	5.5	3.5	4.5	11.5	10.0	10.5	18.0	16.0	17.0
18	4.0	2.5	3.0	7.5	4.0	5.5	---	---	---	17.0	16.0	16.0
19	4.0	2.5	3.0	7.0	3.5	5.0	---	---	---	19.0	16.5	17.5
20	4.0	2.5	3.5	6.5	4.0	5.0	---	---	---	18.5	17.5	17.5
21	5.0	3.0	3.5	7.0	5.0	6.0	---	---	---	17.5	17.0	17.5
22	4.5	2.5	3.0	5.0	4.5	5.0	---	---	---	20.5	17.0	18.5
23	7.0	2.0	4.0	6.5	4.5	5.5	---	---	---	21.5	18.5	19.5
24	6.5	4.5	5.5	5.5	5.0	5.5	---	---	---	21.0	18.5	20.0
25	7.0	3.5	5.0	6.0	5.0	5.5	---	---	---	22.0	19.5	20.5
26	6.0	2.5	4.0	6.0	5.5	5.5	---	---	---	21.0	18.5	20.0
27	4.0	2.0	3.0	7.0	5.0	6.0	---	---	---	20.0	17.5	19.0
28	2.5	1.5	2.0	6.5	5.5	6.0	---	---	---	20.0	17.0	18.5
29	2.5	1.5	2.0	6.0	5.5	6.0	---	---	---	20.0	17.5	18.5
30	---	---	---	8.0	6.0	7.0	12.5	12.5	12.5	18.5	17.5	18.0
31	---	---	---	7.0	5.5	6.5	---	---	---	18.5	17.5	18.0
MONTH	7.0	.0	2.5	8.0	.5	4.5	12.5	6.5	9.5	22.0	12.5	16.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	21.0	17.0	19.0	21.0	18.5	20.0	21.0	19.0	20.0	23.5	20.5	21.5
2	21.0	19.0	20.0	20.5	18.5	19.5	21.5	19.5	20.5	23.5	20.5	21.5
3	21.0	19.0	20.0	19.5	18.0	19.0	21.0	19.0	20.5	24.0	20.0	21.5
4	21.5	18.0	20.0	20.5	18.5	19.0	21.0	19.0	20.5	24.0	19.5	21.0
5	21.0	18.0	19.0	20.0	18.0	18.5	21.5	20.0	20.5	22.0	20.5	21.5
6	18.5	17.5	18.0	23.0	17.0	20.0	---	---	---	27.0	20.0	22.5
7	20.5	17.5	19.0	20.0	17.0	18.5	---	---	---	23.5	18.5	20.5
8	23.0	18.5	20.0	20.0	18.0	18.5	---	---	---	22.5	19.0	20.5
9	20.5	17.0	18.5	20.0	17.5	18.5	---	---	---	22.0	21.0	21.5
10	19.0	17.5	18.0	19.5	17.5	18.5	---	---	---	23.5	21.0	22.0
11	20.0	17.0	18.0	19.5	17.5	18.5	---	---	---	24.0	20.5	22.0
12	20.5	17.0	18.5	21.0	17.0	18.5	---	---	---	23.0	20.5	21.5
13	20.5	17.0	18.5	20.5	17.0	18.5	---	---	---	23.0	19.5	21.0
14	21.0	17.0	18.5	20.0	17.5	18.5	21.0	19.5	20.0	22.5	21.0	21.5
15	20.5	18.0	19.0	20.0	17.5	18.5	21.0	19.0	20.0	24.0	21.0	22.5
16	20.0	18.5	19.5	19.5	17.5	19.0	24.5	18.5	21.0	21.5	18.5	20.0
17	20.5	18.5	19.5	19.5	18.0	19.0	23.5	19.5	21.0	21.0	19.0	20.0
18	19.5	17.5	18.5	20.5	18.0	19.0	21.0	20.5	20.5	22.0	20.0	20.5
19	20.0	17.5	18.5	19.5	18.0	19.0	23.5	20.5	21.5	22.5	18.5	20.0
20	21.0	17.0	19.0	20.5	18.5	19.0	24.0	21.0	22.0	21.0	18.5	19.5
21	21.5	17.0	19.0	20.5	18.5	19.0	22.5	20.5	21.0	22.0	19.0	20.0
22	20.0	17.5	18.5	20.5	17.5	19.0	22.0	21.0	21.0	23.0	20.5	21.5
23	20.0	17.5	19.0	20.5	18.0	19.0	24.0	20.5	21.5	23.0	20.5	21.5
24	20.0	17.5	19.0	21.0	18.5	19.5	24.0	20.0	21.5	22.5	20.0	21.0
25	19.5	18.0	19.0	21.0	18.5	19.5	24.0	20.0	21.5	20.0	19.0	19.5
26	19.5	18.0	18.5	21.0	18.5	19.5	24.0	20.5	21.5	21.5	18.5	20.0
27	20.0	17.5	19.0	20.5	19.0	19.5	24.0	20.5	22.0	20.0	17.5	18.5
28	19.5	17.5	18.5	20.5	19.5	20.0	23.5	20.5	21.5	20.5	17.0	18.5
29	19.0	17.5	18.5	21.0	19.5	20.0	23.5	21.0	21.0	20.0	17.0	18.5
30	21.5	18.5	19.5	21.0	18.5	20.0	22.0	20.5	21.0	19.5	18.5	19.0
31	---	---	---	21.0	19.5	20.0	24.0	20.5	21.5	---	---	---
MONTH	23.0	17.0	19.0	23.0	17.0	19.0	24.5	18.5	21.0	27.0	17.0	20.5

01480700 EAST BRANCH BRANDYWINE CREEK NEAR DOWNINGTON, PA

LOCATION.--Lat 40°02'05", long 75°42'32", Chester County, Hydrologic Unit 02040205, on right bank 20 ft (6 m) downstream from bridge on Dowlin Forge Road, 200 ft (60 m) east of State Highway 282, 0.4 mi (0.6 km) downstream from Shamona Creek, 1.5 mi (2.4 km) downstream from Marsh Creek, 2.0 mi (3.2 km) upstream from Beaver Creek, and 2.2 mi (3.5 km) north of Downingtown.

DRAINAGE AREA.--60.6 mi^2 (157.0 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1948-57, October 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 270 ft (82 m), from topographic map. Prior to July 30, 1966, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow regulated by Marsh Creek reservoir (station 01480684) 1.9 mi (3.1 km) upstream. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--15 years, 95.5 ft^3/s (2.705 m^3/s), 21.40 in/yr (544 mm/yr), adjusted for storage since November 1973.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,070 ft^3/s (229 m^3/s) June 22, 1972, gage height, 12.06 ft (3.676 m), from floodmark, from rating curve extended above 5,000 ft^3/s (140 m^3/s); minimum, 7.2 ft^3/s (0.2 m^3/s) Sept. 2, 3, 11, 12, 13, 1966, gage height, 1.80 ft (0.549 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,520 ft^3/s (43.0 m^3/s) March 21, gage height, 5.42 ft (1.652 m); minimum, 11 ft^3/s (0.31 m^3/s) Sept. 25, gage height, 1.93 ft (0.588 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	230	84	92	105	61	38	384	470	92	49	37	15
2	130	84	88	105	64	36	272	258	84	45	30	14
3	202	217	93	105	57	37	220	223	80	44	32	14
4	123	140	118	101	54	36	258	187	75	44	29	15
5	220	118	118	101	53	40	205	163	69	41	29	21
6	175	109	116	101	52	46	178	150	67	45	32	15
7	123	103	118	105	50	42	163	140	69	38	27	13
8	111	97	113	107	52	47	152	121	80	38	26	16
9	116	93	109	105	50	70	202	103	70	38	25	21
10	575	135	109	101	49	52	230	97	80	35	24	23
11	258	130	109	198	50	67	172	99	69	35	29	32
12	248	178	109	241	49	47	155	155	64	34	28	18
13	223	125	123	86	49	49	147	279	61	32	21	14
14	178	128	133	77	49	121	145	152	59	31	18	19
15	155	123	116	77	49	90	181	128	67	31	18	20
16	142	118	111	74	56	95	145	113	95	46	19	12
17	133	111	111	72	53	181	130	105	67	49	18	12
18	113	105	107	77	50	269	99	128	61	38	17	14
19	79	101	111	140	49	103	74	157	57	34	18	13
20	80	97	110	99	49	86	75	147	56	33	18	12
21	80	93	105	92	50	659	75	178	52	31	17	13
22	80	92	105	86	53	262	72	137	49	38	16	20
23	86	90	105	93	62	196	70	113	47	40	16	20
24	155	90	110	93	53	199	72	107	46	33	16	17
25	99	88	250	93	49	255	80	101	45	31	15	13
26	93	184	150	92	45	184	84	92	44	29	14	25
27	88	160	130	86	40	160	125	84	44	29	14	16
28	95	130	120	77	37	145	401	79	41	28	14	14
29	95	118	115	74	34	230	362	77	53	28	16	18
30	88	105	110	62	---	163	269	75	74	28	21	24
31	86	---	105	61	---	428	---	80	---	27	19	---
TOTAL	4659	3546	3619	3086	1468	4433	5197	4498	1917	1122	673	513
MEAN	150	118	117	99.5	50.6	143	173	145	63.9	36.2	21.7	17.1
MAX	575	217	250	241	64	659	401	470	95	49	37	32
MIN	79	84	88	61	34	36	70	75	41	27	14	12
MEAN‡	153	118	88.8	93.0	60.4	175	175	137	61.4	32.0	18.9	11.9
CFSM‡	2.53	1.94	1.46	1.54	1.00	2.88	2.88	2.26	1.01	.53	.31	.20
IN.‡	2.91	2.16	1.69	1.77	1.07	3.32	3.21	2.60	1.13	.61	.36	.22

CAL YR 1979 TOTAL 54260 MEAN 149 MAX 1500 MIN 40 MEAN‡ 148 CFSM‡ 2.45 IN.‡ 33.21
WTR YR 1980 TOTAL 34731 MEAN 94.9 MAX 659 MIN 12 MEAN‡ 93.8 CFSM‡ 1.55 IN.‡ 21.07

‡ Adjusted for change in Marsh Creek Reservoir.

01480700 EAST BRANCH BRANDYWINE CREEK NEAR DOWNINGTOWN, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1970 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
NOV									
02...	0930	84	185	6.7	11.0	11.2	26	15	11

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS NH4)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, TOTAL (MG/L AS PO4)
NOV									
02...	.1	13	2.7	.030	.04	.48	.51	.160	.49

DATE	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
NOV								
02...	0	0	10	10	0	<.1	0	10

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA

LOCATION.--Lat 39°58'07", long 75°40'25", Chester County, Hydrologic Unit 02040205, on left bank at downstream side of Sugars Bridge (State Highway 322), 2,000 ft (610 m) upstream from Valley Creek, 1.5 mi (2.4 km) north of Marshallton, and 3.3 mi (5.3 km) southeast of Downingtown.

DRAINAGE AREA.--89.9 mi^2 (232.8 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1972 to current year.

REVISED RECORDS.--WDR PA-75-1: 1972(P), 1973, 1974.

GAGE.--Water-stage recorder. Altitude of gage is 195 ft (59.4 m), from topographic map. Feb. 1 to Apr. 10, June 25 to Nov. 17, 1972, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow regulated by Marsh Creek Reservoir (station 01480684) about 7.5 mi (12.1 km) upstream since November 1973.

AVERAGE DISCHARGE.--8 years, 166 ft^3/s (4.701 m^3/s), 25.13 in/yr (638 mm/yr), adjusted for storage since November 1973.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,160 ft^3/s (231 m^3/s) June 22, 1972, gage height, 13.4 ft (4.08 m), from floodmark, from rating curve extended above 3,600 ft^3/s (102 m^3/s) on basis of slope-area measurement of peak flow; minimum, 22 ft^3/s (0.62 m^3/s) Sept. 25, 1980; minimum gage height, 1.97 ft (0.600 m) July 25, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,050 ft^3/s (58.1 m^3/s) March 21, gage height, 7.16 ft (2.182 m); minimum, 22 ft^3/s (0.62 m^3/s) Sept. 25, gage height, 2.02 ft (0.616 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	404	130	144	144	85	51	688	654	136	84	58	30
2	218	130	141	140	95	57	433	351	119	77	46	28
3	301	436	141	139	91	55	316	314	115	77	49	27
4	188	209	169	137	78	55	352	273	107	76	45	27
5	269	171	164	139	75	68	292	243	100	73	44	32
6	270	164	163	135	74	74	245	228	98	74	50	30
7	179	156	174	137	75	69	223	216	100	68	45	26
8	166	148	159	137	74	84	211	207	115	67	43	26
9	170	145	155	136	73	100	263	179	102	67	41	32
10	823	203	154	132	73	82	317	169	114	67	40	31
11	373	190	154	238	70	101	247	169	100	65	48	43
12	326	255	153	351	72	79	210	246	94	63	51	31
13	302	181	174	127	69	84	198	371	91	60	39	26
14	246	180	182	114	72	203	195	208	89	58	36	29
15	219	172	158	113	73	145	252	179	100	57	36	32
16	203	167	156	106	84	143	213	163	153	116	36	26
17	192	157	158	101	77	211	184	154	98	89	33	25
18	179	153	145	113	69	335	158	186	90	61	33	28
19	141	148	148	181	70	151	125	209	88	56	35	26
20	139	145	148	127	70	123	123	229	88	54	34	25
21	137	141	146	118	72	835	120	228	84	51	32	25
22	136	141	150	116	85	495	116	193	81	64	31	30
23	135	139	156	125	88	249	117	164	80	74	31	30
24	232	138	161	118	77	245	118	151	78	57	31	29
25	156	137	337	118	72	330	124	143	77	51	30	29
26	145	430	193	116	68	232	127	127	76	49	30	41
27	140	273	166	109	63	197	160	117	75	48	29	30
28	148	199	157	101	62	180	533	113	73	47	29	26
29	149	179	153	100	58	311	493	110	82	47	29	29
30	137	163	149	89	---	231	331	108	128	48	34	35
31	133	---	147	86	---	586	---	123	---	46	36	---
TOTAL	6956	5580	5055	4143	2164	6161	7484	6525	2931	1991	1184	884
MEAN	224	186	163	134	74.6	199	249	210	97.7	64.2	38.2	29.5
MAX	823	436	337	351	95	835	688	654	153	116	58	43
MIN	133	130	141	86	58	51	116	108	73	46	29	25
MEAN†	227	185	135	127	84.3	230	251	202	95.2	60.0	35.4	24.3
CFSM†	2.53	2.06	1.50	1.41	.94	2.56	2.79	2.25	1.06	.67	.39	.27
IN.†	2.91	2.30	1.73	1.63	1.01	2.96	3.11	2.59	1.18	.77	.45	.30

CAL YR 1979 TOTAL 82815 MEAN 227 MAX 2640 MIN 68 MEAN† 226 CFSM† 2.52 IN.† 34.20
WTR YR 1980 TOTAL 51058 MEAN 140 MAX 835 MIN 25 MEAN† 138 CFSM† 1.54 IN.† 20.96

† Adjusted for change in contents in March Creek Reservoir.

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1965 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: February 1972 to current year.
pH: February 1972 to current year.
WATER TEMPERATURES: February 1972 to current year.
DISSOLVED OXYGEN: February 1972 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 652 micromhos Feb. 6, 1977; minimum, 76 micromhos Jan. 25, 1978.
pH: Maximum, 9.9 May 13, June 5, 1973; minimum, 5.4 Oct. 24, 26, 1973.
WATER TEMPERATURES: Maximum, 33.0°C July 19, 1977; minimum, freezing point Jan. 22, 23, 1976, Feb. 13, 15-17, 19, 1979.
DISSOLVED OXYGEN: Maximum, 16.3 mg/L Dec. 1, 1976; minimum, 1.1 mg/L Aug. 17, 1974.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 385 micromhos Sept. 13; minimum, 121 micromhos May 13.
pH: Maximum, 8.3 May 30, June 14, July 30; minimum, 6.5 April 28 and 29, May 13.
WATER TEMPERATURES: Maximum, 29.5°C July 21, Aug. 5, Sept. 2; minimum, freezing point on many days during winter months.
DISSOLVED OXYGEN: Maximum, 15.8 mg/L Mar. 12; minimum, 3.7 mg/L July 30.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT								
02...	1100	212	179	6.8	18.5	8.8	170000	4.9
09...	1130	163	199	7.0	15.0	9.8	54000	4.5
16...	1130	203	198	7.0	11.5	11.5	--	2.3
23...	1100	135	217	7.0	17.2	9.7	28000	3.2
30...	1200	137	212	6.9	10.8	11.7	4800	1.7
NOV								
06...	1100	163	197	7.0	9.8	12.6	360000	1.9
13...	1130	181	192	6.9	11.4	10.8	--	3.1
20...	1200	145	199	7.2	11.7	12.3	130000	3.5
27...	1300	238	173	7.0	13.0	10.9	36000	7.4
DEC								
04...	1200	171	176	7.0	6.9	13.1	66000	2.7
11...	1130	157	174	7.1	7.4	13.5	3400	2.7
18...	1130	133	176	7.1	3.6	14.4	55000	3.7
26...	1430	181	159	7.0	7.7	12.7	920	3.9
JAN								
02...	1430	139	195	7.1	4.7	13.8	3200	3.2
09...	1100	137	191	6.9	3.2	13.8	760000	5.4
15...	1100	127	214	6.9	7.9	12.7	590000	2.4
23...	1100	137	202	7.1	5.4	12.7	18000	4.1
30...	1230	94	226	7.1	2.0	14.4	--	6.0
FEB								
05...	1130	81	234	7.1	1.5	14.6	26000	3.2
12...	1100	77	232	7.1	1.7	14.2	1200000	2.3
18...	1400	96	259	7.4	3.4	14.9	45000	4.5
26...	1430	82	241	7.7	5.9	14.7	--	4.2
MAR								
04...	1130	61	266	7.3	2.8	14.7	860000	3.1
11...	1430	118	218	7.9	8.1	14.4	1800	11
18...	1330	321	162	6.6	8.1	12.1	670000	4.8
25...	1130	369	165	7.0	6.5	11.6	800000	4.5
APR								
02...	1430	393	164	6.8	10.5	11.6	44000	4.1
08...	1130	210	185	8.2	12.0	11.5	670	2.7
15...	1130	273	180	7.3	12.5	10.8	290000	4.8
22...	1200	118	219	7.5	14.7	12.7	3100	2.7
30...	1330	261	175	6.8	11.6	10.5	4300	5.0
MAY								
07...	1200	218	169	7.1	16.8	10.8	1700	3.3
13...	1130	528	121	6.6	16.1	8.9	48000	12
21...	1100	273	169	6.7	15.7	9.0	86000	5.7
28...	1300	116	211	7.5	17.2	11.4	13000	20
JUN								
04...	1430	106	215	7.9	21.2	10.9	240000	3.1
11...	1230	101	218	7.5	16.6	11.3	1200	2.4
17...	1430	98	228	7.4	20.0	10.6	9200	4.9
25...	1500	78	248	7.7	23.5	11.1	820	3.7

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	CARBON, ORGANIC TOTAL (MG/L AS C)
JUL								
01...	1500	84	237	7.4	23.4	9.6	1800	8.2
08...	1400	68	242	7.3	20.8	9.6	3600	2.0
15...	1430	60	255	7.7	25.0	11.1	92000	3.9
AUG								
05...	1130	48	264	7.3	26.2	8.9	2900	5.8
12...	1130	54	248	6.9	24.6	7.1	440000	9.7
20...	1100	35	306	7.0	22.4	7.1	300000	3.8
26...	1400	32	320	7.4	25.2	10.0	320000	2.5
SEP								
02...	1400	29	285	7.2	27.8	9.0	13000	5.5
09...	1200	33	297	7.2	21.3	8.8	230000	3.9
16...	1400	25	314	7.4	19.7	9.9	100000	7.0
23...	1430	32	315	7.2	24.9	8.4	57000	7.2
30...	1430	35	304	7.0	18.3	8.9	460000	--

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS NH4)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)
AUG 12...	0930	55	246	7.2	24.5	6.5	1.5	.150	.18	.37	.52	660

DATE	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, TOTAL (MG/L AS PO4)	PHOS-PHORUS, TOTAL IN BOT. MAT. (MG/KG AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)
AUG 12...	2.0	8.9	.610	1.9	480	1	0	0	0	<10	10	<10

DATE	COPPER, DIS-SOLVED (UG/L AS CU)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, DIS-SOLVED (UG/L AS NI)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
AUG 12...	4	<10	2	20	<.1	2	<10	0	10	30	6.1

DATE	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	BED MAT. FALL DIAM. % FINER THAN .004 MM	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM
AUG 12...	4.2	6.2	.5	6.7	1	3	5	9	34	77	100

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTON, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	225	123	179	214	203	209	202	188	195	167	154	161
2	193	149	178	215	203	210	200	188	193	205	152	174
3	195	146	170	210	137	158	200	180	190	205	195	199
4	200	176	190	193	167	178	182	172	175	200	190	195
5	205	132	188	200	182	192	183	171	178	206	187	195
6	179	128	159	202	192	198	182	173	178	210	194	202
7	190	177	183	203	194	199	181	171	176	209	194	201
8	203	180	192	206	196	201	182	170	175	207	192	200
9	203	194	197	209	197	204	175	164	171	204	190	196
10	---	---	---	208	181	190	184	165	176	215	193	202
11	167	156	162	194	182	189	183	171	176	250	167	200
12	172	164	168	186	162	174	179	167	175	192	145	168
13	173	166	170	194	185	190	183	164	173	216	193	203
14	176	167	172	195	185	191	171	156	164	224	202	215
15	186	171	179	196	186	191	176	163	170	224	207	217
16	199	179	190	196	187	192	179	165	169	222	207	215
17	203	193	198	199	188	194	176	157	167	221	208	216
18	218	194	202	201	186	195	185	165	172	221	205	214
19	228	217	223	201	190	196	178	162	170	204	174	190
20	229	216	222	200	191	195	177	163	171	203	183	193
21	228	214	221	201	189	196	183	161	172	206	193	201
22	226	213	221	199	184	190	197	163	176	207	196	202
23	223	214	218	201	178	188	200	160	169	204	193	198
24	215	181	192	191	179	185	170	154	163	203	189	196
25	209	197	205	192	181	187	177	132	156	200	190	196
26	210	197	205	191	126	160	---	---	---	205	184	196
27	214	200	207	177	141	164	---	---	---	204	191	196
28	211	196	204	190	178	184	179	166	173	211	196	204
29	214	189	201	191	182	187	180	157	168	213	197	207
30	212	204	206	193	181	188	176	155	163	229	204	212
31	214	209	211	---	---	---	169	154	162	229	202	214
MONTH	229	123	194	215	126	189	202	132	173	250	145	199

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	245	204	224	290	229	261	---	---	---	163	129	146
2	237	211	223	267	232	244	---	---	---	174	164	169
3	238	203	223	281	240	262	---	---	---	175	168	172
4	238	215	224	290	245	259	---	---	---	178	169	173
5	243	218	227	311	245	269	---	---	---	186	170	177
6	245	221	228	268	249	259	---	---	---	175	153	165
7	234	217	227	270	258	264	---	---	---	179	156	168
8	239	220	225	269	235	251	---	---	---	173	158	164
9	239	218	227	249	207	225	---	---	---	172	152	162
10	237	217	227	246	220	234	---	---	---	179	148	166
11	263	224	232	241	211	222	---	---	---	176	163	168
12	248	217	229	249	221	236	---	---	---	164	142	154
13	260	215	228	322	227	244	---	---	---	158	121	141
14	263	218	230	366	236	264	---	---	---	---	---	---
15	237	217	227	252	224	237	---	---	---	---	---	---
16	231	209	221	237	210	222	---	---	---	---	---	---
17	243	217	226	225	148	198	192	184	187	---	---	---
18	259	211	231	185	141	159	213	184	196	---	---	---
19	257	213	227	202	185	190	217	205	211	---	---	---
20	255	211	225	---	---	---	215	200	207	---	---	---
21	229	210	221	---	---	---	213	192	204	---	---	---
22	234	205	221	---	---	---	226	200	215	---	---	---
23	243	207	225	---	---	---	225	213	220	193	185	---
24	236	223	229	---	---	---	223	213	217	192	178	186
25	241	223	233	---	---	---	221	211	216	198	181	188
26	256	224	237	---	---	---	216	204	212	190	164	178
27	243	222	236	---	---	---	216	156	201	200	163	184
28	256	225	240	---	---	---	157	128	142	219	176	199
29	280	234	246	---	---	---	172	130	152	237	204	219
30	---	---	---	---	---	---	177	140	168	225	204	216
31	---	---	---	---	---	---	---	---	---	223	206	215
MONTH	280	203	228	366	141	237	226	128	196	237	121	177

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTON, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	230	191	210	238	220	230	284	225	253	308	260	281
2	229	199	218	242	226	235	287	255	271	347	279	310
3	235	205	222	245	228	238	285	246	264	353	326	343
4	232	209	218	233	212	222	283	257	272	364	333	351
5	218	190	207	232	210	221	298	264	283	359	310	332
6	211	197	205	226	209	218	297	255	273	364	311	333
7	240	198	218	236	212	225	291	257	276	365	321	345
8	229	201	215	245	216	233	300	271	287	357	327	347
9	214	188	201	247	227	240	304	272	289	347	296	319
10	200	178	190	249	229	240	297	257	281	326	297	316
11	222	179	203	249	226	240	272	229	---	324	255	276
12	231	218	223	257	230	245	275	246	---	340	274	312
13	231	217	226	255	225	240	311	272	290	385	330	351
14	234	218	228	266	227	247	330	299	316	375	314	345
15	238	192	225	262	238	252	334	298	316	310	259	292
16	213	174	194	258	241	---	316	291	305	364	304	329
17	230	209	220	---	---	---	301	265	287	376	336	359
18	235	223	229	258	235	247	318	268	292	375	332	355
19	239	224	232	267	246	258	325	299	314	368	324	348
20	238	223	231	267	247	259	344	301	323	375	348	366
21	240	222	233	268	250	261	351	324	340	354	288	322
22	245	225	235	267	198	250	355	318	339	344	277	323
23	248	234	243	261	199	227	351	293	323	341	306	326
24	252	234	244	269	230	250	318	276	300	333	291	318
25	253	237	245	295	247	269	346	281	313	372	318	344
26	250	239	246	299	250	277	352	320	339	330	260	298
27	252	236	245	302	254	279	345	315	335	348	293	313
28	250	231	244	306	254	277	349	322	338	346	314	335
29	249	222	237	295	251	272	353	326	342	347	280	318
30	219	181	203	298	258	274	350	298	320	329	287	305
31	---	---	---	282	262	273	320	280	300	---	---	---
MONTH	253	174	223	306	198	248	355	225	303	385	255	327

PH (UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.1	6.8	7.0	7.5	6.9	7.1	7.4	6.9	7.1	7.3	7.0	7.1
2	7.1	6.8	6.9	7.6	6.9	7.2	7.4	6.9	7.1	7.2	7.0	7.0
3	7.0	6.8	6.9	7.0	6.7	6.8	7.4	6.9	7.1	7.2	7.0	7.1
4	7.1	6.9	7.0	7.1	6.8	6.9	7.5	6.9	7.1	7.2	7.0	7.1
5	7.1	6.8	7.0	7.2	6.9	7.0	7.5	7.0	7.2	7.2	6.9	7.0
6	7.0	6.7	6.9	7.3	6.9	7.1	7.5	7.0	7.1	7.2	7.0	7.1
7	7.2	7.0	7.1	7.4	7.1	7.2	7.7	6.9	7.2	7.2	7.0	7.1
8	7.3	7.1	7.2	7.5	7.1	7.3	7.7	7.0	7.2	7.3	7.0	7.1
9	7.2	7.2	7.2	7.5	7.1	7.3	7.7	7.0	7.2	7.3	6.9	7.1
10	---	---	---	7.2	6.9	7.0	7.6	6.9	7.2	7.3	7.0	7.1
11	6.9	6.8	6.9	7.2	6.9	7.0	7.7	7.0	7.2	7.2	6.8	7.0
12	6.9	6.8	6.9	7.2	6.9	7.0	7.8	6.9	7.2	6.9	6.7	6.8
13	7.0	6.8	6.9	7.1	6.9	7.0	7.1	6.9	7.0	7.1	6.9	7.0
14	7.0	6.9	6.9	7.4	7.0	7.1	7.6	6.9	7.1	7.2	7.0	7.1
15	7.0	6.9	6.9	7.4	6.9	7.1	7.5	6.9	7.1	7.3	6.9	7.1
16	7.1	6.9	7.0	7.3	6.9	7.1	7.4	6.9	7.0	7.3	7.0	7.1
17	7.1	7.0	7.0	7.4	6.9	7.1	7.4	6.9	7.1	7.3	6.9	7.1
18	7.2	7.0	7.1	7.4	6.9	7.1	7.5	7.0	7.1	7.2	7.0	7.1
19	7.3	7.0	7.1	7.5	6.9	7.1	7.3	7.0	7.1	7.1	6.9	7.0
20	7.4	7.0	7.2	7.7	6.9	7.1	7.6	7.0	7.2	7.2	6.9	7.0
21	7.4	7.0	7.1	7.7	6.9	7.2	7.5	7.0	7.1	7.3	7.0	7.1
22	7.3	7.0	7.1	7.9	6.9	7.2	7.5	7.0	7.1	7.1	7.0	7.0
23	7.4	7.0	7.1	7.7	6.9	7.1	7.3	6.9	7.0	7.3	7.0	7.1
24	7.0	6.8	6.9	8.0	6.9	7.3	7.2	6.9	7.0	7.2	7.0	7.1
25	7.3	7.0	7.1	7.9	6.9	7.3	7.0	6.9	7.0	7.2	7.0	7.1
26	7.2	7.0	7.1	7.0	6.7	6.9	---	---	---	7.2	7.0	7.1
27	7.3	7.0	7.1	7.1	6.7	6.9	---	---	---	7.2	7.0	7.1
28	7.1	6.9	7.0	7.4	6.9	7.1	7.3	7.0	7.2	7.3	7.0	7.1
29	7.2	6.9	7.0	7.4	6.9	7.1	7.3	7.0	7.1	7.3	7.0	7.1
30	7.1	6.9	7.0	7.4	6.9	7.1	7.3	7.0	7.1	7.3	6.9	7.1
31	7.4	7.0	7.2	---	---	---	7.2	7.0	7.1	7.3	7.0	7.1
MONTH	7.4	6.7	7.0	8.0	6.7	7.1	7.8	6.9	7.1	7.3	6.7	7.1

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTON, PA--Continued

PH (UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	7.4	7.0	7.1	7.6	7.0	7.2	---	---	---	6.9	6.6	6.7
2	7.4	7.0	7.2	7.6	7.0	7.3	---	---	---	7.0	6.7	6.8
3	7.5	6.9	7.2	7.6	7.1	7.2	---	---	---	7.2	6.8	6.9
4	7.3	7.0	7.1	7.6	7.1	7.3	---	---	---	7.2	6.7	6.9
5	7.3	7.0	7.1	7.6	7.0	7.2	---	---	---	7.3	6.8	7.0
6	7.2	7.0	7.1	7.8	7.0	7.2	---	---	---	7.6	6.8	7.1
7	7.3	7.0	7.2	7.9	7.1	7.5	---	---	---	7.7	6.8	7.1
8	7.3	7.0	7.2	8.0	7.0	7.3	---	---	---	7.3	6.8	7.0
9	7.4	7.1	7.2	8.1	7.0	7.4	---	---	---	7.7	6.8	7.1
10	7.4	7.1	7.2	8.1	6.9	7.4	---	---	---	7.9	6.8	7.2
11	7.4	7.1	7.2	8.0	7.0	7.3	---	---	---	7.4	6.8	7.1
12	7.4	7.1	7.2	8.1	7.0	7.4	---	---	---	6.8	6.7	6.8
13	7.4	7.0	7.2	7.6	7.0	7.2	---	---	---	6.8	6.5	6.7
14	7.5	7.0	7.2	7.2	6.8	7.0	---	---	---	---	---	---
15	7.5	7.1	7.2	7.5	6.9	7.1	---	---	---	---	---	---
16	7.3	7.0	7.1	7.6	6.9	7.1	---	---	---	---	---	---
17	7.5	7.0	7.2	7.1	6.7	6.9	7.7	7.0	7.4	---	---	---
18	7.5	7.0	7.2	6.9	6.6	6.8	7.9	6.9	7.2	---	---	---
19	7.5	7.1	7.3	7.1	6.8	6.9	8.1	6.9	7.4	---	---	---
20	7.6	7.0	7.2	---	---	---	8.2	6.9	7.4	---	---	---
21	7.7	7.0	7.3	---	---	---	8.2	6.9	7.4	---	---	---
22	7.2	7.0	7.1	---	---	---	8.0	6.9	7.3	---	---	---
23	7.7	7.0	7.2	---	---	---	8.1	6.9	7.4	7.8	6.9	---
24	7.9	7.0	7.3	---	---	---	8.2	6.9	7.4	7.6	6.8	7.1
25	8.0	7.1	7.4	---	---	---	8.0	6.8	7.2	8.0	6.8	7.3
26	7.9	7.1	7.4	---	---	---	7.3	6.8	7.0	8.0	6.9	7.3
27	7.8	7.0	7.3	---	---	---	7.0	6.7	6.8	8.0	6.9	7.4
28	7.8	7.1	7.3	---	---	---	6.6	6.5	6.5	8.0	6.9	7.3
29	7.7	7.0	7.3	---	---	---	6.7	6.5	6.6	8.1	6.9	7.4
30	---	---	---	---	---	---	6.9	6.7	6.8	8.3	6.9	7.5
31	---	---	---	---	---	---	---	---	---	7.4	6.9	7.0
MONTH	8.0	6.9	7.2	8.1	6.6	7.2	8.2	6.5	7.1	8.3	6.5	7.1

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	7.9	6.8	7.2	7.5	6.8	7.0	7.9	6.8	7.2	7.3	6.7	6.9
2	7.5	6.8	7.1	7.7	6.8	7.1	8.0	6.8	7.3	7.4	6.7	7.0
3	7.9	6.8	7.2	7.1	6.8	6.9	8.0	6.8	7.2	7.4	6.9	7.1
4	8.0	6.9	7.3	7.5	6.8	7.0	8.1	6.8	7.3	7.5	6.9	7.1
5	8.1	6.9	7.4	7.4	6.8	7.0	8.1	6.9	7.3	7.4	6.9	7.0
6	7.8	6.9	7.2	7.6	6.8	7.1	7.9	6.8	7.2	7.4	6.8	7.0
7	8.2	6.8	7.3	7.6	6.8	7.1	7.9	6.8	7.2	7.5	6.8	7.0
8	7.8	6.8	7.1	7.6	6.8	7.1	7.9	6.8	7.2	7.6	6.8	7.1
9	7.6	6.8	7.1	7.8	6.8	7.2	7.9	6.8	7.2	7.7	6.9	7.2
10	7.5	6.8	7.0	7.7	6.8	7.1	7.8	6.8	7.2	7.7	6.9	7.2
11	8.0	6.8	7.2	7.8	6.8	7.2	7.4	6.6	---	7.5	6.9	7.1
12	8.1	6.9	7.4	7.8	6.8	7.2	7.5	6.8	---	7.6	6.9	7.1
13	8.2	6.9	7.4	7.9	6.8	7.2	7.6	6.8	7.1	7.8	6.9	7.2
14	8.3	6.9	7.4	7.9	6.8	7.2	7.7	6.8	7.2	7.4	6.9	7.1
15	8.2	6.8	7.3	7.9	6.8	7.2	7.4	6.8	7.0	7.6	6.8	7.1
16	7.0	6.7	6.8	8.0	6.8	---	7.6	6.8	7.1	7.6	6.8	7.1
17	7.5	6.9	7.1	---	---	---	7.5	6.8	7.0	7.5	6.9	7.1
18	7.6	6.8	7.1	7.5	6.8	7.0	7.2	6.8	6.9	7.5	6.9	7.1
19	7.8	6.8	7.2	7.7	6.8	7.1	7.5	6.8	7.0	7.6	6.9	7.1
20	7.7	6.8	7.1	8.0	6.8	7.3	7.7	6.8	7.1	7.5	6.9	7.1
21	7.9	6.8	7.2	8.1	6.8	7.3	7.7	6.9	7.2	7.7	6.8	7.1
22	7.8	6.8	7.2	8.1	6.8	7.2	7.6	6.9	7.1	7.5	6.8	7.0
23	7.9	6.8	7.2	7.0	6.7	6.8	7.6	6.9	7.1	7.3	6.8	7.0
24	7.9	6.8	7.2	7.8	6.8	7.1	7.7	6.8	7.1	7.5	6.8	7.0
25	7.9	6.8	7.2	7.9	6.8	7.2	7.6	6.8	7.1	6.9	6.7	6.8
26	7.7	6.8	7.2	8.1	6.8	7.3	7.7	6.9	7.2	7.1	6.7	6.9
27	7.9	6.8	7.2	8.2	6.7	7.3	7.9	6.9	7.2	7.1	6.7	6.8
28	7.9	6.8	7.2	8.2	6.8	7.4	7.8	6.9	7.2	7.3	6.8	6.9
29	7.6	6.8	7.0	8.1	6.8	7.3	7.7	6.9	7.1	7.2	6.7	6.9
30	7.1	6.7	6.8	8.3	6.8	7.4	7.5	6.9	7.1	7.2	6.8	6.9
31	---	---	---	8.2	6.8	7.4	7.2	6.8	7.0	---	---	---
MONTH	8.3	6.7	7.2	8.3	6.7	7.2	8.1	6.6	7.1	7.8	6.7	7.0

01480870 EAST BRANC'H BRANDYWINE CREEK BELOW DOWNINGTON, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	18.5	18.0	18.0	12.5	10.0	11.0	7.0	5.5	6.5	5.0	3.5	4.0
2	19.5	18.0	18.5	15.0	12.0	13.5	6.5	5.5	6.0	5.0	3.5	4.5
3	20.0	19.0	19.5	15.0	11.0	13.0	6.0	4.0	5.0	6.0	4.5	5.5
4	19.5	17.5	18.5	11.0	9.5	10.5	7.0	5.5	6.5	4.5	3.0	4.0
5	19.0	17.5	18.0	10.5	8.5	9.5	7.5	5.5	6.5	4.0	2.5	3.5
6	17.0	16.0	16.5	11.0	8.5	10.0	9.0	6.0	7.0	3.5	1.5	2.5
7	16.5	15.5	16.0	12.5	11.0	11.5	9.0	8.0	8.5	3.5	1.5	3.0
8	16.0	15.0	15.5	11.5	10.5	11.0	8.5	6.5	7.5	4.5	3.0	3.5
9	16.0	16.0	16.0	14.0	11.5	12.5	7.5	6.0	6.5	4.5	2.5	3.5
10	---	---	---	14.0	13.0	14.0	8.0	6.0	7.0	4.5	1.5	3.0
11	13.0	12.0	13.0	14.0	12.0	13.0	9.0	6.5	7.5	8.0	3.0	5.5
12	14.0	13.0	13.5	12.0	11.0	12.0	10.5	7.5	9.0	7.0	4.0	6.0
13	14.0	12.5	13.5	12.0	11.5	11.5	10.5	9.5	10.5	5.0	2.5	4.0
14	13.0	12.0	12.5	11.5	10.0	11.0	9.5	7.0	8.5	9.0	5.0	6.5
15	13.5	11.5	12.5	10.0	8.5	9.5	7.0	5.0	6.0	9.5	7.5	8.5
16	13.0	11.5	12.5	10.5	8.5	9.5	8.5	5.5	7.0	7.5	5.5	6.5
17	13.5	12.0	12.5	9.5	7.5	9.0	8.5	3.0	5.5	7.0	5.0	6.0
18	15.0	12.5	14.0	10.5	8.0	9.5	4.0	2.5	3.5	7.5	7.0	7.5
19	15.0	13.0	14.0	10.5	8.5	10.0	3.5	3.0	3.5	7.5	6.5	7.0
20	16.5	14.5	15.5	12.5	10.5	11.5	4.5	3.0	3.5	6.5	5.0	5.5
21	18.0	15.0	16.5	11.5	10.0	11.0	4.5	2.5	3.5	5.0	3.0	4.0
22	18.0	16.0	17.0	12.5	10.5	11.5	6.0	4.0	5.0	5.5	3.0	4.0
23	19.0	16.5	17.5	13.5	11.0	12.0	7.0	5.0	6.0	6.5	3.5	5.0
24	17.5	13.5	15.0	14.5	12.0	13.5	9.0	7.0	7.5	3.0	1.0	2.0
25	13.0	12.0	12.5	16.0	14.0	15.0	11.0	9.0	10.5	3.0	1.5	2.5
26	12.5	11.0	11.5	18.0	15.5	17.0	---	---	---	3.5	1.0	2.5
27	12.0	10.5	11.0	15.5	11.5	13.5	---	---	---	3.5	1.0	2.5
28	11.5	10.5	11.0	12.0	10.5	11.5	6.5	5.5	6.5	5.0	3.0	3.5
29	12.5	10.5	11.5	10.5	7.5	9.0	6.5	5.0	6.0	4.0	2.0	3.0
30	11.5	10.0	10.5	7.5	6.0	7.0	6.5	4.5	5.5	3.0	.5	1.5
31	11.0	10.5	11.0	---	---	---	6.0	4.0	5.0	3.0	.0	1.0
MONTH	20.0	10.0	14.5	18.0	6.0	11.5	11.0	2.5	6.5	9.5	.0	4.0

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	8.5	.0	1.5	4.0	.0	1.0	---	---	---	15.0	11.5	13.0
2	10.5	.0	3.0	3.5	.0	1.0	---	---	---	15.5	12.5	14.0
3	12.5	.0	3.0	4.0	.0	1.0	---	---	---	18.0	13.0	15.5
4	3.5	.0	1.0	5.0	.0	2.0	---	---	---	18.5	13.5	16.0
5	3.0	.0	1.0	5.5	2.0	3.5	---	---	---	19.0	13.0	16.0
6	2.0	.0	1.0	8.5	3.5	5.0	---	---	---	19.5	14.5	17.0
7	3.5	.5	2.0	---	---	---	---	---	---	19.5	15.0	17.0
8	3.5	.0	1.5	---	---	---	---	---	---	16.5	14.5	15.0
9	3.0	.5	2.0	---	---	---	---	---	---	15.0	12.5	14.0
10	4.0	.5	2.0	---	---	---	---	---	---	16.5	11.0	14.0
11	4.0	.0	1.5	8.0	5.0	6.5	---	---	---	15.0	13.5	14.5
12	4.0	.5	2.0	6.0	2.5	4.5	---	---	---	17.0	14.0	15.5
13	5.0	.5	2.0	4.0	1.5	2.5	---	---	---	22.0	16.0	17.5
14	4.5	.5	2.0	2.0	.5	1.0	---	---	---	---	---	---
15	5.0	2.0	3.5	5.0	.5	3.0	---	---	---	---	---	---
16	4.5	2.5	3.5	7.0	3.0	5.0	---	---	---	---	---	---
17	4.0	.5	2.0	7.5	5.0	6.0	14.5	9.5	13.0	---	---	---
18	3.5	.0	1.0	8.5	6.0	7.0	16.0	10.0	13.0	---	---	---
19	4.5	.0	2.0	8.0	5.0	6.0	18.0	12.0	15.0	---	---	---
20	5.5	.5	3.0	---	---	---	18.5	12.5	16.0	---	---	---
21	8.0	3.5	5.5	---	---	---	20.0	14.5	17.0	---	---	---
22	6.0	5.5	5.5	---	---	---	16.0	13.0	14.5	---	---	---
23	7.5	4.5	6.0	---	---	---	16.5	11.0	14.0	22.0	20.5	---
24	8.5	6.5	7.5	---	---	---	17.0	12.0	15.0	20.5	18.5	19.5
25	7.5	5.0	6.0	---	---	---	17.5	14.5	15.5	22.0	18.0	20.0
26	6.0	2.5	4.0	---	---	---	14.5	12.5	13.0	20.5	16.5	18.5
27	4.5	1.5	3.0	---	---	---	12.0	11.5	12.0	18.5	15.0	17.0
28	3.5	1.0	2.0	---	---	---	11.5	11.0	11.0	19.0	15.0	17.0
29	4.5	.0	1.5	---	---	---	11.5	10.5	11.0	19.5	16.0	18.0
30	---	---	---	---	---	---	12.0	11.5	11.5	20.0	17.0	18.5
31	---	---	---	---	---	---	---	---	---	19.5	17.5	18.5
MONTH	12.5	.0	3.0	8.5	.0	3.5	20.0	9.5	13.5	22.0	11.0	16.5

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTON, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	22.0	17.5	20.0	23.5	19.0	21.5	26.5	22.5	24.5	29.0	23.5	25.5
2	21.5	19.0	20.5	25.0	19.5	22.5	27.5	23.0	25.0	29.5	24.0	26.0
3	22.5	19.0	20.5	23.0	21.0	22.0	29.0	23.5	26.0	27.5	22.0	24.5
4	21.5	18.5	20.0	25.5	20.5	22.5	28.5	23.5	26.0	27.0	20.5	23.5
5	20.5	16.5	18.5	24.0	20.5	22.0	29.5	24.5	26.5	25.5	22.0	23.5
6	18.0	16.0	17.0	25.0	20.5	22.5	28.0	24.5	26.0	27.5	22.5	24.5
7	22.5	17.0	19.5	23.5	18.0	20.5	28.5	23.0	25.5	26.0	21.0	23.0
8	22.5	18.5	20.5	21.5	19.0	20.0	28.5	23.0	25.5	24.5	18.0	21.0
9	18.0	15.5	16.5	24.5	19.0	21.5	29.0	24.5	26.5	25.0	18.0	21.5
10	18.0	15.0	16.5	24.5	21.5	23.0	28.0	23.5	25.5	26.0	21.0	23.0
11	18.5	14.0	16.5	27.0	22.5	24.0	27.0	23.5	---	23.0	18.0	20.5
12	19.5	14.5	17.0	26.5	22.0	24.0	26.0	24.0	---	24.5	17.5	20.5
13	20.5	15.0	18.0	26.0	19.5	22.5	26.5	21.5	23.5	25.0	18.5	21.5
14	21.5	16.0	19.0	26.5	19.5	22.5	25.5	20.5	23.0	24.5	22.0	23.0
15	21.5	18.0	20.0	26.0	20.5	23.0	25.0	22.5	23.5	24.5	20.5	22.5
16	20.0	18.0	19.0	27.5	22.0	---	24.5	20.5	22.0	21.0	16.5	19.0
17	21.0	16.0	18.5	---	---	---	24.5	18.0	21.0	22.5	18.5	20.5
18	19.5	16.0	18.0	26.5	22.0	24.0	21.0	19.5	20.0	25.0	20.5	22.5
19	21.0	15.5	18.0	25.5	22.5	24.0	23.5	20.0	21.5	23.5	17.5	20.0
20	20.0	17.0	18.0	28.5	22.5	25.0	26.5	21.0	23.5	22.0	17.0	19.5
21	21.5	16.5	19.0	29.5	24.5	26.5	24.0	21.5	22.5	24.5	19.0	21.5
22	22.0	18.0	20.0	28.5	24.0	25.5	23.0	21.0	22.0	26.5	21.0	23.5
23	23.0	18.0	20.5	24.5	22.0	23.0	24.5	21.0	22.5	25.5	21.5	23.5
24	23.5	19.0	21.0	24.5	20.5	22.5	26.5	20.0	23.0	22.0	18.0	20.0
25	24.0	20.0	22.0	25.0	20.0	22.0	26.0	20.5	23.0	18.5	18.0	18.0
26	23.0	19.5	21.5	25.0	21.0	23.0	27.0	21.0	23.5	20.5	16.5	18.0
27	24.5	19.5	22.0	25.5	21.5	23.0	27.5	21.5	24.0	17.5	13.0	15.0
28	24.5	20.5	22.5	24.0	21.5	22.5	27.5	22.0	24.5	18.0	11.5	14.5
29	23.5	20.5	22.0	25.0	22.0	23.0	27.0	23.5	25.0	18.0	14.0	16.0
30	23.5	20.0	21.5	27.0	22.0	24.5	27.5	23.5	25.0	19.5	16.0	17.5
31	---	---	---	27.0	22.0	24.5	27.0	23.0	25.0	---	---	---
MONTH	24.5	14.0	19.5	29.5	18.0	23.0	29.5	18.0	24.0	29.5	11.5	21.0

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	8.9	8.4	8.6	12.2	9.6	10.8	---	---	---	13.9	12.3	12.9
2	9.0	8.3	8.7	11.4	8.7	10.0	---	---	---	13.8	12.3	12.9
3	8.6	8.1	8.4	10.2	8.5	9.5	---	---	---	13.5	12.3	12.7
4	9.4	8.5	8.8	11.7	10.2	10.9	13.3	11.2	12.2	14.2	12.5	13.2
5	9.3	8.3	8.8	12.2	10.6	11.2	13.4	11.0	11.9	14.0	12.6	13.1
6	10.2	8.6	9.4	12.6	10.6	11.6	13.1	10.4	11.6	14.4	12.6	13.3
7	10.5	10.1	10.3	11.9	11.6	11.8	13.1	10.3	11.3	13.8	12.5	13.1
8	10.7	10.0	10.4	12.0	11.4	11.7	13.3	10.8	11.8	14.0	12.5	13.0
9	10.1	9.9	10.0	11.6	10.7	11.2	14.0	11.3	12.3	14.3	12.5	13.2
10	---	---	---	10.7	9.1	9.6	13.8	11.3	12.2	14.7	13.0	13.7
11	10.4	9.7	10.1	10.4	9.2	9.8	14.0	11.1	12.1	14.0	11.9	13.0
12	10.0	9.3	9.7	11.0	9.7	10.2	13.9	10.7	11.9	13.0	12.1	12.6
13	10.0	9.6	9.8	11.2	9.7	10.3	11.5	10.6	10.9	14.3	12.8	13.4
14	10.8	10.0	10.5	12.1	10.3	11.0	13.5	11.1	12.0	13.4	11.7	12.7
15	11.0	10.1	10.6	12.7	10.7	11.5	14.2	11.7	12.6	13.0	11.3	11.9
16	11.5	10.4	10.8	12.3	10.6	11.2	13.6	11.2	12.2	13.4	11.2	12.1
17	11.2	10.2	10.7	12.8	10.6	11.5	13.9	11.0	12.4	14.0	11.5	12.4
18	11.1	9.8	10.4	12.8	10.4	11.4	14.8	12.4	13.2	12.8	11.4	11.9
19	11.3	9.7	10.4	13.0	10.4	11.4	14.2	12.6	13.1	12.7	11.4	12.1
20	11.1	9.3	10.0	12.7	10.1	11.0	14.8	12.6	13.4	13.7	11.9	12.6
21	10.9	8.8	9.8	13.1	10.1	11.2	14.9	12.6	13.4	14.0	12.2	12.9
22	10.6	8.6	9.4	13.1	9.9	11.0	14.2	12.0	12.8	13.6	11.9	12.8
23	10.2	8.1	9.1	12.8	9.7	10.9	13.7	11.7	12.4	13.4	11.9	12.4
24	10.7	7.9	9.5	12.8	9.4	10.7	12.8	11.2	11.9	14.3	12.2	13.2
25	11.6	10.8	11.3	12.2	8.9	10.2	11.2	10.4	10.8	13.8	12.6	13.1
26	12.0	11.2	11.7	9.1	8.3	8.8	---	---	---	14.2	12.6	13.2
27	12.2	11.5	11.8	10.9	9.0	10.0	---	---	---	14.4	12.5	13.3
28	11.8	11.5	11.7	---	---	---	13.8	12.1	12.8	14.0	12.3	13.0
29	12.0	11.3	11.6	---	---	---	13.6	12.0	12.6	14.1	12.3	13.1
30	12.2	11.4	11.9	---	---	---	13.5	12.0	12.5	14.6	12.6	13.5
31	12.4	10.2	11.2	---	---	---	13.7	12.0	12.7	14.4	12.9	13.5
MONTH	12.4	7.9	10.2	13.1	8.3	10.8	14.9	10.3	12.3	14.7	11.2	12.9

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTON, PA--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

		FEBRUARY			MARCH			APRIL			MAY	
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	14.9	11.7	13.5	15.0	12.2	13.4	---	---	---	10.4	9.3	10.0
2	14.8	11.3	13.2	14.8	12.4	13.3	---	---	---	10.6	9.1	9.8
3	14.6	11.0	13.2	14.6	12.2	13.0	---	---	---	10.5	8.5	9.6
4	14.3	12.9	13.4	15.3	12.0	13.2	---	---	---	10.5	8.5	9.5
5	14.7	12.8	13.6	14.5	11.6	12.7	---	---	---	10.5	8.2	9.4
6	14.6	13.0	13.7	15.2	11.5	12.8	---	---	---	10.7	8.3	9.3
7	14.7	12.9	13.6	15.4	10.6	13.2	---	---	---	11.0	8.3	9.3
8	14.7	12.8	13.6	14.1	9.4	11.5	---	---	---	10.5	8.2	9.2
9	14.6	12.7	13.5	14.4	9.3	11.4	---	---	---	11.3	8.8	10.0
10	14.6	12.6	13.4	15.4	9.8	12.1	---	---	---	12.1	8.6	10.4
11	14.8	12.7	13.5	14.4	9.4	11.6	---	---	---	11.3	7.6	9.4
12	14.7	12.6	13.4	15.8	10.8	12.9	---	---	---	---	---	---
13	15.0	12.7	13.6	14.6	11.0	12.6	---	---	---	---	---	---
14	14.9	12.6	13.5	13.6	12.2	12.9	---	---	---	---	---	---
15	14.7	12.0	13.2	14.7	11.5	13.0	---	---	---	---	---	---
16	13.3	11.9	12.5	14.7	11.2	12.8	---	---	---	---	---	---
17	14.8	12.4	13.4	12.5	10.6	11.6	13.6	10.5	12.2	---	---	---
18	15.0	12.9	13.6	12.1	10.4	11.3	13.4	9.5	11.6	---	---	---
19	14.9	12.1	13.4	12.3	10.4	11.1	13.7	9.0	11.2	---	---	---
20	14.5	11.4	12.9	---	---	---	13.7	8.6	11.0	---	---	---
21	14.2	10.8	12.2	---	---	---	13.3	8.4	10.4	---	---	---
22	12.7	10.7	11.6	---	---	---	12.9	8.2	10.3	---	---	---
23	14.1	10.6	12.2	---	---	---	13.1	7.9	10.2	10.9	7.6	---
24	14.1	10.5	11.9	---	---	---	13.1	7.5	10.0	10.3	7.6	8.7
25	14.9	10.8	12.3	---	---	---	12.4	7.5	9.3	11.0	7.7	9.0
26	15.0	10.9	12.5	---	---	---	11.3	7.9	9.6	11.2	7.7	9.2
27	14.9	11.5	12.8	---	---	---	10.4	9.0	9.7	11.6	8.0	9.6
28	15.0	11.6	12.9	---	---	---	10.1	9.6	10.0	11.5	7.6	9.4
29	15.3	11.9	13.2	---	---	---	10.3	9.9	10.1	11.5	7.5	9.1
30	---	---	---	---	---	---	10.5	9.9	10.1	12.0	7.6	9.2
31	---	---	---	---	---	---	---	---	---	9.9	7.2	8.3
MONTH	15.3	10.5	13.1	15.8	9.3	12.4	13.7	7.5	10.4	12.1	7.2	9.4

		JUNE			JULY			AUGUST			SEPTEMBER	
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.8	6.1	7.8	9.6	6.4	---	10.4	5.6	7.4	8.5	4.7	6.1
2	7.9	5.5	6.5	9.9	6.0	7.6	10.7	5.3	7.3	9.2	4.5	6.0
3	10.1	5.7	7.7	8.1	5.9	6.9	10.5	5.3	7.0	9.0	4.8	6.3
4	10.9	6.7	8.4	9.3	6.3	7.5	10.9	5.3	7.3	9.6	5.1	6.7
5	11.5	7.4	9.0	9.5	6.3	7.5	11.2	5.2	7.2	9.1	5.1	6.6
6	11.0	7.5	9.2	9.4	6.3	7.5	10.4	5.2	7.1	9.2	5.2	6.6
7	11.6	6.9	9.0	10.0	6.5	7.9	10.7	5.4	7.3	9.5	5.2	6.8
8	10.4	6.5	8.1	10.7	6.5	8.0	10.6	5.3	7.2	10.5	5.8	7.4
9	10.8	7.3	8.8	10.7	6.6	8.3	10.2	5.0	6.8	10.1	5.9	7.4
10	11.0	7.8	9.0	10.3	6.5	7.9	10.0	4.8	6.8	9.7	5.4	6.9
11	11.8	7.9	9.4	10.4	6.1	7.8	9.2	4.6	---	9.7	5.9	7.5
12	12.1	7.7	9.5	10.4	6.1	7.7	9.0	5.4	---	10.0	5.8	7.3
13	12.2	7.3	9.4	10.8	6.3	7.9	9.4	5.1	6.6	10.4	5.2	7.2
14	12.3	7.0	9.1	10.9	6.0	7.9	10.0	4.8	6.9	8.7	4.8	6.4
15	11.9	6.9	8.5	11.1	5.9	7.9	8.9	4.3	5.9	9.9	5.3	7.0
16	8.4	6.8	7.8	11.1	5.9	---	9.4	4.8	6.5	10.5	5.9	7.5
17	10.6	7.2	8.6	---	---	---	9.3	5.0	6.6	9.7	5.3	7.0
18	10.7	7.2	8.7	9.6	6.5	7.7	8.1	5.1	6.3	9.4	5.0	6.5
19	10.9	7.3	8.8	10.2	6.4	7.9	8.2	4.4	6.0	10.1	5.2	6.9
20	10.7	7.2	8.6	10.9	6.0	8.0	9.5	4.0	6.2	10.0	5.2	6.9
21	11.3	6.9	8.8	11.2	5.7	7.6	9.6	4.8	6.5	10.5	4.7	6.8
22	11.0	6.8	8.4	11.1	5.6	7.4	9.5	4.9	6.6	9.8	4.2	6.2
23	11.2	6.4	8.4	7.9	5.9	6.7	9.4	4.9	6.6	8.4	3.8	5.4
24	10.8	6.2	8.0	10.0	6.4	7.8	9.6	5.0	6.7	9.7	4.4	6.3
25	11.1	6.0	7.8	10.6	5.8	8.2	9.3	4.6	6.5	5.8	4.5	5.1
26	---	---	---	10.9	4.4	7.9	10.7	4.4	6.5	8.0	4.9	6.2
27	---	---	---	11.2	4.0	7.4	11.3	4.9	7.2	8.9	5.8	7.0
28	---	---	---	11.3	4.0	7.6	11.0	4.7	7.1	9.7	6.4	7.6
29	---	---	---	10.8	3.9	7.2	10.5	4.7	6.7	9.5	6.2	7.4
30	---	---	---	12.2	3.7	7.5	9.4	5.0	6.5	9.3	5.9	7.0
31	---	---	---	11.8	5.2	7.9	7.8	4.9	6.1	---	---	---
MONTH	12.3	5.5	8.5	12.2	3.7	7.7	11.3	4.0	6.7	10.5	3.8	6.7

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA

LOCATION.--Lat 39°52'11", long 75°35'37", Delaware County, Hydrologic Unit 02040205, on left bank 27 ft (8 m) upstream from Penn Central Railroad bridge at Chadds Ford, 150 ft (46 m) upstream from Harvey run and 1,200 ft (370 m) downstream from highway bridge on U.S. Highway 1.

DRAINAGE AREA.--287 mi^2 (743 km^2), including that of Harvey Run.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1911 to December 1953, October 1962 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1202: 1917-18 (M), 1919-20, 1922-31 (M), 1932-33, 1934 (M), 1936, 1938 (P), 1939 (M), 1942, 1944-46 (M).

GAGE.--Water-stage recorder. Datum of gage is 150.45 ft (45.857 m) National Geodetic Vertical Datum of 1929. Prior to May 21, 1927, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow regulated by Marsh Creek Reservoir (station 01480684) about 17 mi (27 km) upstream.

AVERAGE DISCHARGE.--60 years (1911-53, 1962-80), 400 ft^3/s (11.33 m^3/s), 18.91 in/yr (480 mm/yr), adjusted for storage since November 1973.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,800 ft^3/s (674 m^3/s) June 22, 1972, gage height, 16.56 ft (5.047 m) from rating curve extended above 9,000 ft^3/s (255 m^3/s) on basis of area-velocity study; minimum, 4.9 ft^3/s (0.14 m^3/s) Oct. 2, 1941, gage height, 0.28 ft (0.085 m); minimum daily, 42 ft^3/s (1.19 m^3/s) Sept. 12, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,340 ft^3/s (123 m^3/s) March 21, gage height, 8.00 ft (2.438 m); minimum, 78 ft^3/s (2.21 m^3/s) Sept. 14, 16, gage height, 1.26 ft (0.384 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1210	490	530	410	320	250	2180	2260	525	304	185	125
2	1030	485	525	400	330	309	1420	1160	450	254	168	100
3	1010	1450	495	395	330	300	1080	1010	430	241	156	93
4	770	880	540	385	330	295	1250	865	405	250	152	87
5	840	665	520	395	320	290	1030	765	361	232	141	90
6	1230	605	525	380	310	314	855	720	342	228	144	97
7	735	580	615	376	314	277	785	690	361	210	144	97
8	640	545	525	385	314	314	740	755	410	202	133	87
9	620	520	520	380	300	376	995	650	380	210	125	87
10	2410	820	520	356	304	318	1080	585	405	215	125	90
11	1460	785	520	540	290	385	820	585	376	206	148	93
12	1080	1010	515	1490	300	309	725	820	342	193	168	93
13	1060	740	620	575	281	314	690	1310	318	185	144	84
14	895	700	680	485	286	945	690	815	309	177	121	84
15	820	635	545	485	290	640	945	635	309	172	121	97
16	780	620	530	440	342	595	735	565	520	202	125	87
17	735	570	540	420	328	670	640	530	371	690	118	84
18	700	550	470	440	281	1350	595	660	314	246	114	100
19	605	520	490	750	290	655	530	660	304	202	121	97
20	585	510	495	525	281	500	515	910	300	189	121	90
21	570	495	480	470	290	1790	490	820	290	181	114	87
22	550	490	505	450	342	1780	475	735	272	181	111	87
23	545	485	530	490	395	825	465	585	263	286	107	90
24	955	475	550	445	352	740	465	530	259	237	104	84
25	660	465	1110	430	323	1070	465	520	254	181	100	84
26	570	1600	705	420	304	760	465	475	246	164	97	121
27	525	1110	520	405	281	645	550	430	241	164	93	111
28	595	750	465	395	272	585	1600	410	237	156	93	90
29	600	645	450	385	263	995	1700	400	286	160	90	87
30	520	585	430	347	---	870	1070	380	505	156	97	93
31	500	---	415	330	---	2010	---	425	---	152	129	---
TOTAL	25805	20780	16880	14579	8963	21476	26045	22660	10385	6828	3909	2796
MEAN	832	693	545	470	309	693	868	731	346	220	126	93.2
MAX	2410	1600	1110	1490	395	2010	2180	2260	525	690	185	125
MIN	500	465	415	330	263	250	465	380	237	152	90	84
CFSM	2.90	2.42	1.90	1.64	1.08	2.42	3.02	2.55	1.21	.77	.44	.33
IN.	3.34	2.69	2.19	1.89	1.16	2.78	3.38	2.94	1.35	.88	.51	.36

WTR YR 1980 TOTAL 181104 MEAN 495 MAX 2410 MIN 84 CFSM 1.73 IN 23.47

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1963 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1965 to current year.
pH: October 1965 to September 1966, December 1971 to current year.
WATER TEMPERATURES: October 1964 to current year.
DISSOLVED OXYGEN: October 1971 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 445 micromhos Oct. 25, 1971; minimum, 42 micromhos Nov. 26, 1979.
pH: Maximum, 9.8 Apr. 9, 1975; minimum, 6.1 Feb. 22, 1976.
WATER TEMPERATURES: Maximum, 31.0°C Jul. 18, 19, 1977; minimum daily, freezing point on many days during winter months.
DISSOLVED OXYGEN: Maximum, 17.1 mg/L Dec. 5, 1976; minimum, 4.7 mg/L July 10, 1975.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 289 micromhos Sept. 15; minimum, 42 micromhos Nov. 26.
pH: Maximum, 8.9 Mar. 10; minimum, 6.9 Mar. 22.
WATER TEMPERATURES: Maximum, 30.5°C July 21; minimum, freezing point on many days during winter months.
DISSOLVED OXYGEN: Maximum, 15.3 mg/L Feb. 18 and 19, Mar. 1; minimum, 5.2 mg/L Aug. 6.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT								
02...	1300	940	142	7.0	18.5	8.6	60000	5.7
09...	1330	605	170	7.4	15.0	10.1	10000	2.7
16...	1430	760	157	7.3	12.5	10.9	--	4.2
23...	1400	545	167	7.5	18.8	9.6	1200	2.1
30...	1400	505	162	7.3	11.8	11.6	500	1.6
NOV								
06...	1330	615	151	7.3	9.9	11.7	99000	3.1
13...	1430	730	138	7.4	12.0	10.4	--	5.5
20...	1400	520	142	7.3	11.6	11.7	13000	2.5
28...	1130	750	127	7.2	11.8	10.6	12000	6.1
DEC								
04...	1430	545	198	7.5	5.7	13.5	1200	3.3
11...	1330	655	189	7.4	7.1	13.3	--	1.8
18...	1400	570	183	7.6	2.1	14.3	1100	1.8
27...	1100	510	169	7.2	6.6	12.2	770	3.3
JAN								
02...	1200	390	163	7.4	3.9	13.8	140	2.5
08...	1230	366	170	7.5	3.7	13.8	4500	2.0
15...	1400	495	199	7.5	8.5	12.2	54000	6.8
23...	1200	475	191	7.6	2.0	12.8	5000	4.1
30...	1030	337	201	7.5	1.0	13.2	--	8.3
FEB								
05...	1400	342	197	7.4	1.3	14.4	--	2.1
12...	1330	286	170	7.6	2.3	14.2	160	3.2
18...	1130	232	170	7.4	1.0	14.7	400	2.1
26...	1230	295	161	7.9	5.5	13.4	--	2.8
MAR								
04...	1400	259	222	7.8	1.3	15.0	180	2.6
11...	1200	410	203	7.4	7.8	12.4	3700	5.4
19...	1130	610	180	7.1	7.4	11.8	260000	7.2
25...	1400	1180	165	7.2	7.5	11.4	170000	--
APR								
01...	1230	1870	144	7.2	7.2	11.9	29000	5.4
08...	1400	725	177	7.5	14.1	11.4	63	--
15...	1500	940	178	7.4	13.8	10.2	14000	--
22...	1430	485	208	8.3	16.4	12.6	130	3.7
29...	1230	1860	135	7.0	11.0	10.5	61000	--
MAY								
06...	1200	720	180	7.2	17.6	9.5	680	3.9
13...	1400	1670	154	7.1	17.3	9.0	9600	7.3
21...	1400	935	174	7.3	16.3	9.0	21000	11
29...	1130	410	186	7.2	18.1	9.4	2100	1.8
JUN								
04...	1200	400	203	7.3	20.5	8.8	67000	.4
10...	1430	435	209	7.3	16.7	9.6	760	2.3
18...	1200	323	212	7.3	18.5	8.8	760	1.3
23...	1200	259	214	7.4	21.1	8.9	780	2.5

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	CARBON, ORGANIC TOTAL (MG/L AS C)
JUL								
02...	1130	254	214	7.1	22.8	7.6	2100	4.2
08...	1200	206	227	7.2	21.5	7.7	1400	1.6
15...	1130	168	227	7.3	24.1	7.9	1100	3.2
AUG								
06...	1200	144	248	7.6	27.4	8.0	680	4.2
12...	1430	172	242	7.6	27.0	8.1	1600	8.0
20...	1330	125	262	7.5	24.4	8.7	5300	1.7
26...	1130	97	260	7.5	23.5	8.6	320	5.2
SEP								
03...	1430	94	255	8.1	27.7	9.6	1700	5.6
09...	1430	87	282	8.2	23.6	10.5	250	--
16...	1200	94	283	7.6	20.2	8.5	400	7.5
23...	1130	97	282	7.5	24.1	7.7	290	5.5
30...	1130	84	272	7.3	17.5	8.6	810	6.3

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
NOV										
05...	1330	665	148	7.4	10.3	11.7	44	22	14	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS NH4)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)
NOV										
05...	12	2.2	2.1	.010	.01	.31	.32	2.5	11	.150

DATE	PHOS-PHORUS, TOTAL (MG/L AS PO4)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
NOV									
05...	.46	0	0	10	0	0	<.1	0	20

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS NH4)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)
AUG 12...	1200	164	238	7.3	26.3	6.7	1.7	.120	.15	.20	.32	527

DATE	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	NITRO-GEN,TOT IN BOT-TOM MA-TERIAL (MG/KG AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, TOTAL (MG/L AS PO4)	PHOS-PHORUS, TOTAL IN BOT. MAT. (MG/KG AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
AUG 12...	2.0	8.9	540	.260	.80	300	1	0	0	0	<10	10

DATE	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, DIS-SOLVED (UG/L AS NI)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
AUG 12...	<10	3	<10	2	20	<.1	4	<10	0	10	30	4.5

DATE	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	BED MAT. FALL DIAM. % FINER THAN .004 MM	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM
AUG 12...	3.2	3.0	.0	3.0	2	5	9	17	29	66	96	100

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	186	122	165	163	159	161	144	131	135	176	172	174
2	158	118	138	164	159	161	167	146	157	176	161	168
3	169	138	156	159	100	124	190	168	178	168	164	167
4	173	140	157	143	113	130	200	191	198	170	165	167
5	178	158	172	153	144	148	199	195	196	169	165	166
6	164	111	132	154	151	153	198	196	197	188	169	176
7	169	149	161	156	150	153	199	196	198	187	169	175
8	173	169	171	154	151	153	200	196	198	191	170	177
9	178	165	172	154	151	152	203	197	199	188	166	172
10	164	95	121	153	133	143	201	197	199	190	167	174
11	138	105	122	140	134	137	201	189	195	196	160	176
12	146	138	144	139	125	132	191	188	190	186	132	147
13	151	146	149	146	131	139	192	185	189	162	142	155
14	155	150	153	144	139	141	189	183	186	169	163	168
15	159	155	157	143	140	141	193	186	189	201	170	184
16	162	154	158	144	141	142	196	190	193	199	196	197
17	159	154	157	146	139	141	193	186	189	201	197	199
18	160	157	159	147	141	145	191	182	187	201	194	198
19	168	157	163	145	141	143	188	181	184	197	180	188
20	170	166	168	145	140	142	188	183	185	188	183	186
21	170	167	168	141	138	139	198	187	190	194	188	192
22	170	167	168	143	138	140	197	187	189	196	194	---
23	172	161	168	139	133	136	202	188	193	---	---	---
24	161	139	150	140	136	138	194	180	185	195	190	191
25	158	144	154	140	134	137	185	147	173	199	193	195
26	161	157	159	136	42	97	171	146	160	199	194	195
27	162	158	160	120	73	100	175	169	172	201	193	196
28	162	155	159	131	120	127	173	171	172	198	195	196
29	158	150	153	135	130	133	179	173	175	201	197	199
30	163	155	160	136	131	133	181	173	176	202	197	199
31	162	157	160	---	---	---	178	172	174	208	200	204
MONTH	186	95	156	164	42	139	203	131	184	208	132	182

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	217	199	210	199	170	184	149	113	136	162	134	148
2	219	207	214	190	167	180	158	141	149	176	160	171
3	223	206	215	193	174	182	163	158	162	180	175	178
4	210	201	206	231	189	216	170	154	162	184	178	182
5	204	197	201	227	219	224	169	154	163	186	183	184
6	205	197	201	253	227	236	176	169	172	190	177	183
7	205	196	199	226	220	223	173	169	171	182	180	181
8	204	196	200	224	215	219	181	172	176	184	177	181
9	201	192	197	220	211	217	173	157	167	183	175	179
10	205	196	200	212	203	209	163	155	159	186	181	184
11	200	193	197	215	200	206	170	160	167	187	182	185
12	204	169	187	199	194	197	175	169	172	185	162	177
13	179	169	173	209	189	201	174	170	173	163	138	151
14	183	168	175	256	192	225	174	170	172	170	144	159
15	183	170	175	238	210	224	179	164	171	180	170	176
16	184	168	174	215	200	208	188	179	185	183	181	182
17	201	170	180	210	186	197	189	186	187	186	183	184
18	183	164	173	200	153	166	195	187	191	187	178	182
19	179	166	172	193	162	179	200	192	196	180	170	173
20	177	164	170	200	194	197	200	195	198	183	141	158
21	183	166	171	201	120	172	200	191	195	174	160	170
22	170	164	167	162	122	143	210	197	203	178	165	172
23	177	164	172	181	162	172	213	207	211	187	178	183
24	172	163	169	181	178	180	213	208	210	191	186	188
25	172	165	168	178	161	170	216	209	212	191	187	189
26	170	160	165	177	164	173	217	209	213	189	185	187
27	171	162	166	184	176	180	212	203	207	189	185	187
28	172	164	168	185	182	183	204	144	160	194	190	192
29	175	162	168	184	163	175	155	135	145	192	182	187
30	---	---	---	177	163	168	174	156	168	189	184	187
31	---	---	---	179	113	152	---	---	---	190	185	188
MONTH	223	160	184	256	113	192	217	113	178	194	134	178

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	189	173	181	209	185	194	261	245	251	272	263	268
2	181	176	178	217	210	213	250	237	242	269	230	244
3	188	181	185	219	213	216	254	239	245	259	243	252
4	205	185	196	223	213	219	258	245	250	274	260	268
5	209	203	207	215	207	212	259	242	249	280	270	275
6	212	207	209	216	207	212	258	246	251	283	279	281
7	214	208	211	214	209	211	259	247	252	279	270	274
8	215	205	210	229	208	219	258	242	251	288	273	283
9	208	198	202	232	224	228	257	250	254	284	275	279
10	210	201	206	230	224	228	259	250	255	281	276	279
11	207	203	204	232	220	228	266	250	260	280	276	277
12	211	207	209	240	225	233	247	235	240	283	261	274
13	216	208	212	238	229	233	247	230	237	274	264	267
14	216	210	213	237	226	231	249	237	242	283	271	277
15	220	213	216	238	226	233	259	249	254	289	278	286
16	227	192	205	239	230	234	268	256	261	288	269	281
17	203	190	196	195	168	179	264	257	261	274	267	269
18	214	204	211	226	195	212	262	248	256	279	263	271
19	218	213	216	237	226	233	252	245	249	284	271	278
20	223	215	219	252	237	243	265	252	259	281	277	279
21	221	218	219	251	239	244	266	258	263	280	276	278
22	227	218	222	246	239	243	271	261	266	285	278	282
23	224	213	218	243	217	228	269	266	268	284	274	281
24	220	214	217	235	218	224	272	262	268	281	272	278
25	219	216	217	247	223	235	271	262	267	282	269	275
26	221	214	217	249	246	248	267	256	261	282	269	275
27	221	215	218	258	248	252	270	258	264	284	270	276
28	226	216	220	256	244	249	282	271	276	274	255	264
29	218	210	215	253	243	247	279	266	274	273	256	264
30	209	179	197	253	244	248	280	274	278	---	---	---
31	---	---	---	255	248	252	284	260	273	---	---	---
MONTH	227	173	208	258	168	228	284	230	257	289	230	274

PH (UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.2	7.1	7.2	7.6	7.4	7.5	7.6	7.4	7.5	7.6	7.4	7.5
2	7.2	7.0	7.1	7.6	7.3	7.4	7.7	7.4	7.6	7.8	7.4	7.6
3	7.3	7.2	7.2	7.4	7.1	7.2	7.7	7.5	7.6	7.7	7.5	7.6
4	7.4	7.2	7.3	7.4	7.2	7.3	7.7	7.4	7.6	7.7	7.5	7.6
5	7.4	7.3	7.3	7.4	7.3	7.4	7.7	7.4	7.6	7.7	7.5	7.6
6	7.3	7.2	7.3	7.5	7.3	7.4	7.7	7.4	7.5	7.7	7.5	7.6
7	7.4	7.3	7.3	7.5	7.3	7.4	7.7	7.4	7.5	7.7	7.5	7.6
8	7.5	7.4	7.4	7.6	7.4	7.5	7.8	7.4	7.6	7.8	7.5	7.6
9	7.4	7.3	7.4	7.6	7.4	7.5	7.8	7.4	7.6	7.7	7.5	7.6
10	7.4	7.3	7.3	7.4	7.3	7.3	7.8	7.4	7.6	7.7	7.5	7.6
11	7.3	7.3	7.3	7.3	7.2	7.3	7.8	7.4	7.6	7.7	7.4	7.6
12	7.4	7.3	7.3	7.4	7.3	7.3	7.9	7.4	7.6	7.4	7.3	7.4
13	7.4	7.3	7.3	7.4	7.3	7.3	7.6	7.4	7.4	7.5	7.4	7.4
14	7.4	7.3	7.4	7.6	7.4	7.5	7.7	7.4	7.5	7.5	7.4	7.5
15	7.4	7.4	7.4	7.6	7.4	7.5	7.7	7.4	7.5	7.6	7.4	7.5
16	7.4	7.3	7.4	7.6	7.4	7.5	7.7	7.4	7.5	7.6	7.4	7.5
17	7.4	7.3	7.4	7.6	7.4	7.5	7.8	7.4	7.6	7.6	7.4	7.5
18	7.5	7.3	7.4	7.7	7.4	7.5	7.7	7.5	7.6	7.6	7.4	7.5
19	7.5	7.3	7.4	7.7	7.4	7.5	7.6	7.5	7.6	7.5	7.4	7.5
20	7.5	7.3	7.4	7.7	7.3	7.5	7.7	7.5	7.6	7.6	7.4	7.5
21	7.6	7.3	7.4	7.7	7.4	7.5	7.7	7.5	7.6	7.7	7.5	7.6
22	7.5	7.3	7.4	7.8	7.4	7.6	7.7	7.4	7.6	7.6	7.5	---
23	7.6	7.3	7.4	7.9	7.4	7.6	7.6	7.4	7.5	---	---	---
24	7.5	7.3	7.4	7.9	7.4	7.6	7.5	7.4	7.4	7.7	7.6	7.7
25	7.5	7.4	7.4	8.0	7.3	7.6	7.4	7.3	7.4	7.6	7.5	7.6
26	7.6	7.4	7.5	7.6	7.0	7.2	7.4	7.3	7.4	7.7	7.5	7.6
27	7.6	7.4	7.5	7.3	7.1	7.2	7.6	7.2	7.5	7.7	7.5	7.6
28	7.5	7.4	7.4	7.5	7.1	7.4	7.6	7.4	7.5	7.7	7.5	7.6
29	7.6	7.4	7.5	7.6	7.4	7.5	7.6	7.4	7.5	7.8	7.5	7.6
30	7.5	7.3	7.4	7.7	7.4	7.5	7.6	7.4	7.5	7.7	7.5	7.6
31	7.6	7.4	7.5	---	---	---	7.6	7.4	7.5	7.7	7.6	7.7
MONTH	7.6	7.0	7.4	8.0	7.0	7.4	7.9	7.2	7.5	7.8	7.3	7.6

CHRISTINA RIVER BASIN

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA--Continued

PH (UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	7.7	7.6	7.6	8.1	7.7	7.9	7.3	7.2	7.2	7.2	7.1	7.2
2	7.7	7.6	7.6	8.0	7.7	7.8	7.3	7.2	7.3	7.3	7.2	7.2
3	7.6	7.5	7.6	8.0	7.7	7.8	7.4	7.2	7.3	7.4	7.2	7.3
4	7.6	7.5	7.6	8.1	7.7	7.9	7.3	7.2	7.3	7.6	7.2	7.3
5	7.7	7.4	7.6	8.1	7.7	7.9	7.5	7.3	7.4	7.6	7.2	7.4
6	7.7	7.6	7.6	8.3	7.6	7.9	7.5	7.3	7.4	7.8	7.2	7.5
7	7.7	7.6	7.6	8.3	7.6	7.9	7.6	7.3	7.4	8.0	7.3	7.6
8	7.7	7.6	7.7	8.6	7.5	8.0	7.7	7.3	7.4	7.6	7.3	7.4
9	7.7	7.6	7.7	8.8	7.5	8.1	7.4	7.3	7.3	7.9	7.4	7.6
10	7.7	7.6	7.7	8.9	7.6	8.2	7.5	7.3	7.4	8.2	7.4	7.7
11	7.7	7.6	7.7	8.4	7.4	7.9	7.8	7.3	7.5	7.9	7.4	7.6
12	7.7	7.6	7.6	8.5	7.4	7.9	7.8	7.3	7.5	7.6	7.3	7.4
13	7.7	7.6	7.6	8.0	7.5	7.7	8.1	7.3	7.6	7.3	7.1	7.2
14	7.7	7.5	7.6	7.5	7.3	7.3	7.6	7.3	7.4	7.4	7.2	7.3
15	7.7	7.5	7.6	7.6	7.3	7.4	7.5	7.3	7.4	7.7	7.3	7.5
16	7.7	7.5	7.6	7.7	7.3	7.5	7.9	7.3	7.6	7.9	7.3	7.6
17	7.7	7.5	7.6	7.5	7.3	7.4	8.0	7.4	7.6	8.0	7.4	7.6
18	7.8	7.4	7.7	7.3	7.1	7.2	8.2	7.4	7.7	7.8	7.4	7.5
19	7.9	7.6	7.8	7.5	7.1	7.3	8.5	7.3	7.8	7.7	7.3	7.4
20	7.9	7.6	7.8	7.8	7.3	7.5	8.6	7.3	7.9	7.5	7.2	7.3
21	8.0	7.6	7.8	7.5	7.0	7.2	8.7	7.3	8.0	7.4	7.3	7.3
22	7.8	7.5	7.6	7.2	6.9	7.1	8.7	7.4	8.0	7.6	7.3	7.4
23	8.0	7.4	7.7	7.3	7.2	7.2	8.6	7.4	8.0	7.7	7.3	7.5
24	8.1	7.5	7.7	7.3	7.2	7.3	8.5	7.4	7.9	7.6	7.3	7.4
25	8.2	7.5	7.8	7.3	7.2	7.2	8.2	7.3	7.7	7.8	7.3	7.5
26	8.4	7.6	8.0	7.5	7.3	7.4	7.8	7.3	7.5	7.9	7.4	7.6
27	8.4	7.7	8.0	7.5	7.3	7.4	7.5	7.3	7.4	8.1	7.4	7.7
28	8.3	7.7	8.0	7.6	7.3	7.4	7.4	7.2	7.2	8.3	7.5	7.8
29	8.2	7.7	8.0	7.4	7.3	7.3	7.2	7.0	7.2	8.1	7.2	7.7
30	---	---	---	7.4	7.2	7.3	7.3	7.2	7.3	8.0	7.3	7.6
31	---	---	---	7.3	7.1	7.2	---	---	---	7.8	7.3	7.5
MONTH	8.4	7.4	7.7	8.9	6.9	7.6	8.7	7.0	7.5	8.3	7.1	7.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.7	7.2	7.4	7.4	7.2	7.2	8.0	7.4	7.7	8.0	7.2	7.5
2	7.6	7.2	7.4	7.5	7.1	7.3	8.1	7.3	7.6	8.1	7.2	7.6
3	7.7	7.2	7.4	7.4	7.2	7.3	8.3	7.3	7.7	8.2	7.3	7.6
4	7.9	7.2	7.5	7.5	7.2	7.4	8.2	7.3	7.7	8.3	7.3	7.7
5	8.1	7.3	7.7	7.6	7.3	7.4	8.4	7.3	7.7	8.2	7.4	7.7
6	7.8	7.4	7.6	7.7	7.3	7.5	8.4	7.3	7.7	8.3	7.3	7.7
7	8.2	7.3	7.7	7.8	7.3	7.5	8.4	7.3	7.8	8.3	7.4	7.8
8	7.9	7.3	7.6	7.6	7.2	7.5	8.4	7.3	7.8	8.3	7.4	7.8
9	7.8	7.3	7.5	7.8	7.3	7.5	8.3	7.3	7.7	8.4	7.4	7.8
10	7.7	7.3	7.5	7.6	7.3	7.4	8.4	7.3	7.7	8.4	7.4	7.8
11	8.0	7.3	7.6	7.8	7.3	7.5	8.1	7.3	7.6	8.3	7.4	7.8
12	8.1	7.3	7.7	8.0	7.3	7.5	7.8	7.2	7.4	8.3	7.5	7.8
13	8.2	7.3	7.7	8.3	7.3	7.7	7.9	7.2	7.5	8.4	7.4	7.8
14	8.3	7.4	7.8	8.0	7.3	7.6	8.0	7.3	7.6	8.2	7.4	7.7
15	8.1	7.3	7.7	8.0	7.3	7.5	7.8	7.3	7.5	8.2	7.3	7.7
16	7.6	7.2	7.3	8.0	7.3	7.5	7.9	7.3	7.5	7.9	7.4	7.6
17	7.5	7.2	7.3	7.0	7.0	7.0	7.8	7.4	7.6	7.9	7.3	7.6
18	7.7	7.3	7.4	7.2	7.0	7.1	7.5	7.3	7.4	7.8	7.3	7.5
19	7.8	7.3	7.5	7.4	7.2	7.3	7.6	7.3	7.4	7.9	7.3	7.6
20	7.8	7.3	7.5	7.5	7.2	7.3	7.8	7.3	7.5	8.0	7.3	7.6
21	7.8	7.3	7.5	7.7	7.3	7.4	7.8	7.4	7.5	8.0	7.3	7.6
22	7.9	7.3	7.6	7.8	7.3	7.5	7.8	7.4	7.5	8.1	7.3	7.7
23	8.1	7.3	7.6	7.4	7.2	7.3	7.8	7.3	7.5	8.0	7.3	7.6
24	8.0	7.3	7.6	7.5	7.2	7.3	7.9	7.4	7.6	8.1	7.3	7.6
25	7.9	7.3	7.6	7.7	7.3	7.4	8.1	7.4	7.7	7.7	7.3	7.4
26	7.7	7.3	7.5	7.9	7.3	7.6	8.3	7.3	7.7	7.6	7.2	7.4
27	7.7	7.3	7.5	8.1	7.4	7.6	8.4	7.4	7.8	7.7	7.3	7.5
28	7.8	7.3	7.5	8.1	7.4	7.7	8.5	7.4	7.9	7.8	7.3	7.5
29	7.5	7.3	7.4	8.1	7.4	7.7	8.5	7.4	7.9	7.7	7.3	7.4
30	7.3	7.2	7.2	8.3	7.4	7.7	8.4	7.4	7.8	---	---	---
31	---	---	---	8.3	7.4	7.8	7.9	7.4	7.6	---	---	---
MONTH	8.3	7.2	7.5	8.3	7.0	7.5	8.5	7.2	7.6	8.4	7.2	7.6

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	19.0	18.5	18.5	12.5	10.0	11.5	6.0	4.5	5.5	5.0	3.5	4.5
2	19.5	18.0	18.5	15.5	12.5	14.0	5.5	4.5	5.0	4.5	3.5	4.0
3	20.0	19.0	19.5	15.5	12.5	14.5	4.5	3.5	4.0	5.5	4.5	5.0
4	19.5	18.0	19.0	12.5	10.5	11.0	6.0	3.5	4.5	4.5	3.0	4.0
5	19.0	17.5	18.5	10.5	9.0	10.0	6.5	5.0	6.0	3.0	2.5	3.0
6	17.5	16.0	16.5	10.5	8.5	9.5	8.0	6.0	7.0	3.0	1.5	2.5
7	16.0	14.5	15.5	11.0	10.0	10.5	9.5	8.0	9.0	3.0	1.5	2.0
8	14.5	13.5	14.0	11.0	10.0	10.5	8.5	7.0	8.0	4.5	3.0	3.5
9	15.0	14.0	14.5	13.0	11.0	11.5	7.0	6.0	6.5	3.5	2.5	3.0
10	14.5	10.0	12.0	15.0	13.0	14.0	7.0	5.5	6.0	2.5	1.0	2.0
11	11.5	10.0	10.5	15.0	13.0	14.0	7.5	5.5	6.5	7.0	2.0	3.5
12	13.0	12.0	12.5	13.0	12.5	12.5	9.5	7.0	8.0	7.5	3.5	6.0
13	13.5	13.0	13.5	12.5	11.5	12.0	10.0	9.5	9.5	3.5	2.5	3.0
14	13.0	11.5	12.0	11.5	10.5	11.0	9.5	7.0	8.0	6.5	3.5	4.5
15	13.5	11.5	12.5	10.0	9.0	9.5	7.0	5.0	6.0	8.5	6.5	7.5
16	13.0	12.0	12.5	10.0	9.0	9.5	7.0	5.0	6.0	8.0	6.0	7.0
17	14.0	13.0	13.5	9.0	7.5	8.5	7.5	3.5	5.5	6.5	5.0	6.0
18	16.0	14.0	15.0	10.0	8.0	9.0	3.0	1.5	2.0	7.0	6.5	6.5
19	16.5	14.5	15.5	10.5	8.5	9.5	2.0	2.0	2.0	7.5	6.5	7.0
20	17.5	15.5	16.5	12.0	10.0	11.0	3.0	2.0	2.5	6.5	5.0	6.0
21	19.5	17.0	18.0	11.0	10.0	10.5	3.5	1.5	2.5	5.0	3.5	4.0
22	20.0	18.0	19.0	12.0	10.5	11.5	6.0	3.5	5.0	3.5	3.0	---
23	19.5	18.0	18.5	13.0	11.0	12.0	7.5	6.0	6.5	---	---	---
24	18.5	13.5	16.0	14.0	12.5	13.0	9.5	7.5	8.0	2.5	1.5	2.0
25	13.5	12.0	12.5	16.0	14.0	15.0	12.0	9.5	11.0	2.5	1.5	2.0
26	12.0	10.5	11.0	17.5	16.0	17.0	10.5	8.5	9.5	3.5	2.0	2.5
27	11.5	9.5	10.5	16.5	12.5	14.0	8.0	6.0	7.0	3.5	1.5	2.5
28	10.5	10.0	10.0	12.5	11.0	12.0	6.5	5.0	5.5	4.5	3.0	3.5
29	11.5	9.5	10.5	11.0	7.5	9.5	6.5	5.0	6.0	4.0	2.5	3.5
30	12.0	10.0	11.0	7.5	5.5	6.5	7.0	5.5	6.0	2.5	.5	1.5
31	11.5	9.5	10.5	---	---	---	6.0	4.5	5.5	1.5	.5	1.0
MONTH	20.0	9.5	14.5	17.5	5.5	11.5	12.0	1.5	6.0	8.5	.5	4.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.0	.5	.5	.5	.0	.5	10.0	5.5	7.5	14.5	11.5	12.5
2	1.0	.5	.5	1.0	.0	.5	11.0	8.5	9.5	16.0	13.5	14.5
3	1.0	.5	.5	1.0	.0	.5	12.0	9.0	11.0	18.0	14.5	16.0
4	1.5	.5	1.0	2.0	.0	1.0	12.0	10.5	11.5	18.0	15.5	17.0
5	1.5	.5	1.0	5.0	1.5	3.5	12.0	10.0	11.0	19.0	15.5	17.0
6	.5	.0	.0	7.0	4.0	5.5	13.0	9.5	11.5	19.5	17.0	18.5
7	1.5	.0	.5	6.0	4.5	5.5	13.0	11.0	12.0	19.5	17.5	18.5
8	2.0	.0	.5	10.0	6.0	8.0	14.5	12.0	13.5	19.0	15.0	16.5
9	1.5	.5	1.0	11.0	8.5	9.5	14.0	13.0	13.5	15.0	13.0	14.0
10	2.5	.5	1.5	9.5	6.5	8.5	15.0	13.0	14.0	15.5	12.0	14.0
11	2.5	.0	1.5	9.5	6.5	8.0	15.5	13.0	14.5	15.5	14.5	15.0
12	2.5	.5	1.5	6.5	3.5	5.0	15.0	13.0	14.0	16.5	14.0	15.0
13	3.0	.5	1.5	5.0	2.0	3.5	16.0	13.5	15.0	19.0	16.5	17.5
14	3.0	.5	2.0	3.0	2.0	2.5	15.5	12.5	13.5	19.0	18.0	18.5
15	4.0	2.0	3.0	5.5	2.0	4.0	14.0	12.5	13.0	18.5	16.0	17.0
16	4.0	3.0	3.5	7.0	4.0	5.5	12.5	9.5	11.0	18.0	15.0	16.5
17	3.0	1.0	2.0	8.0	6.0	7.0	11.5	7.5	9.5	17.5	15.5	16.5
18	2.5	.5	1.0	9.0	7.5	8.5	13.5	9.5	11.5	16.5	16.0	16.0
19	3.0	.5	1.5	9.0	6.5	8.0	16.0	11.5	14.0	18.5	15.5	17.0
20	4.5	1.5	3.0	9.5	7.5	8.5	16.5	13.0	15.0	18.5	17.5	17.5
21	7.5	4.0	6.0	11.0	9.5	10.5	18.0	15.0	16.5	17.5	16.0	16.5
22	7.0	6.0	6.5	9.5	6.0	7.5	16.5	14.0	15.5	19.0	15.0	17.0
23	8.5	6.0	7.0	9.0	5.0	7.0	16.5	13.0	15.0	21.0	18.0	19.5
24	8.5	7.5	8.0	8.5	7.5	8.0	17.0	13.5	15.5	21.0	19.5	20.0
25	8.0	6.5	7.5	7.5	7.0	7.5	18.5	15.5	17.0	21.5	19.0	20.0
26	7.0	3.5	5.5	8.0	6.0	7.0	16.5	13.0	14.5	20.5	18.0	19.5
27	4.0	2.5	3.0	10.0	6.0	8.0	13.0	12.0	12.5	19.0	16.5	17.5
28	3.0	1.5	2.0	9.5	8.0	9.0	12.0	11.5	11.5	19.0	15.5	17.5
29	2.5	.0	1.0	9.5	8.5	9.0	11.5	11.0	11.5	20.0	17.0	18.5
30	---	---	---	11.0	9.5	10.0	11.5	11.5	11.5	20.5	18.0	19.0
31	---	---	---	11.0	7.0	9.0	---	---	---	20.5	19.0	19.5
MONTH	8.5	.0	2.5	11.0	.0	6.5	18.5	5.5	13.0	21.5	11.5	17.0

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	22.5	18.5	20.5	24.5	21.5	23.0	27.5	25.0	26.0	28.5	25.0	26.5
2	23.0	20.5	22.0	25.5	22.0	23.5	28.0	24.5	26.0	29.5	25.5	27.5
3	23.0	20.5	21.5	24.5	23.5	24.0	29.5	25.5	27.5	28.0	25.5	26.5
4	22.0	20.0	21.0	26.0	22.5	24.0	28.5	26.0	27.5	26.5	23.0	25.0
5	21.5	18.5	20.0	25.5	23.0	24.5	30.0	26.0	28.0	26.0	23.5	24.5
6	20.0	18.0	18.5	25.5	23.0	24.0	28.5	27.0	27.5	26.5	23.5	25.0
7	22.0	17.5	19.5	24.5	21.0	23.0	28.5	25.0	27.0	25.5	23.0	24.5
8	23.0	20.5	21.5	23.0	21.5	22.0	28.5	25.0	27.0	24.0	21.0	23.0
9	20.5	17.5	18.5	25.0	20.5	22.5	28.5	26.0	27.5	24.0	20.0	22.5
10	17.5	16.0	17.0	25.5	23.0	24.0	28.5	25.5	27.0	24.5	22.0	23.0
11	18.5	15.0	17.0	27.0	24.0	25.0	28.5	25.0	26.5	23.0	19.5	21.5
12	19.0	16.0	17.5	27.0	24.0	25.5	27.0	25.5	26.5	23.0	19.0	21.0
13	20.5	16.5	18.5	26.5	22.5	24.5	26.5	24.0	25.5	23.5	19.5	21.5
14	21.5	18.0	19.5	27.0	22.0	24.5	26.5	23.0	24.5	24.0	21.5	22.5
15	21.5	19.5	21.0	26.5	23.0	25.0	25.5	24.0	24.5	24.0	21.5	23.0
16	21.5	19.0	20.0	28.5	24.0	25.5	25.0	22.5	23.5	22.0	19.0	20.5
17	20.5	17.0	19.0	25.5	23.0	24.5	24.5	20.5	22.5	22.0	19.0	20.5
18	20.0	18.0	19.0	27.0	24.0	25.5	22.5	21.5	21.5	23.0	21.0	22.0
19	20.5	17.5	19.0	26.5	24.5	25.5	22.5	21.0	21.5	22.5	19.5	21.0
20	20.5	18.5	19.5	29.0	24.5	26.5	25.5	21.5	23.5	21.5	18.5	20.5
21	21.0	18.0	19.5	30.5	26.5	28.0	24.0	22.5	23.5	23.5	19.5	21.5
22	22.5	19.5	21.0	29.5	26.5	28.0	23.5	21.5	22.5	25.0	21.0	23.0
23	23.0	20.0	21.5	27.0	24.5	25.5	24.5	21.5	23.0	25.0	23.0	24.0
24	23.5	21.0	22.0	26.0	23.0	24.5	26.0	21.5	24.0	23.5	20.5	22.0
25	24.5	22.0	23.0	26.5	22.5	24.5	26.0	22.0	24.0	22.0	19.5	20.0
26	24.0	22.0	23.0	27.5	23.5	25.5	26.5	22.5	24.5	21.0	19.0	19.5
27	25.0	22.0	23.5	28.0	24.5	26.0	27.0	23.0	25.0	18.5	16.5	17.5
28	25.5	23.0	24.0	26.5	24.5	25.5	27.0	23.5	25.0	18.0	14.5	16.5
29	25.0	23.0	24.0	27.0	24.5	25.5	27.0	24.5	25.5	18.0	15.5	16.5
30	24.5	22.0	23.0	28.0	25.0	26.5	27.5	24.5	26.0	---	---	---
31	---	---	---	28.0	24.5	26.0	27.5	24.5	26.0	---	---	---
MONTH	25.5	15.0	20.5	30.5	20.5	25.0	30.0	20.5	25.0	29.5	14.5	22.0

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	8.6	8.2	8.4	11.8	10.6	11.1	12.9	11.9	12.4	14.3	13.0	13.6
2	8.6	8.3	8.4	11.0	9.6	10.4	13.0	11.9	12.5	14.1	13.3	13.7
3	8.4	8.2	8.3	10.0	9.0	9.4	13.4	12.3	12.8	13.8	12.7	13.3
4	8.8	8.3	8.5	11.1	10.0	10.7	13.5	12.3	12.8	14.2	12.9	13.5
5	8.9	8.5	8.7	11.7	10.8	11.2	13.5	12.2	12.8	14.2	13.2	13.7
6	8.7	8.0	8.5	11.7	11.0	11.3	13.0	11.9	12.4	14.6	13.2	13.9
7	9.0	8.5	8.7	11.3	10.6	10.9	12.6	11.2	11.9	14.4	13.6	14.0
8	9.5	8.9	9.2	11.7	10.6	11.1	13.0	11.4	12.1	14.0	13.1	13.6
9	10.1	8.9	9.4	11.3	10.3	10.8	13.8	12.0	12.8	14.1	12.9	13.5
10	11.1	9.9	10.6	10.3	9.4	9.6	13.7	12.1	12.9	14.6	13.3	14.0
11	11.2	10.8	11.1	9.8	9.3	9.6	13.5	12.0	12.6	14.0	12.1	13.4
12	10.8	10.3	10.6	10.2	9.7	9.9	13.3	11.6	12.3	12.5	10.8	11.7
13	10.6	10.3	10.4	10.5	9.6	10.0	11.7	10.9	11.1	13.3	12.5	12.9
14	11.1	10.5	10.9	11.1	10.3	10.7	12.7	11.0	11.8	12.8	11.8	12.3
15	11.2	10.7	11.0	11.8	10.8	11.3	13.6	12.0	12.8	12.2	11.1	11.6
16	11.0	10.5	10.7	11.7	10.8	11.2	13.2	12.2	12.7	12.7	11.6	12.2
17	10.7	10.3	10.4	12.1	11.1	11.5	13.4	11.6	12.5	13.3	12.1	12.6
18	10.5	9.8	10.2	12.0	10.9	11.4	14.5	12.9	13.6	12.6	11.9	12.2
19	10.4	9.7	10.0	12.0	10.8	11.3	14.0	13.2	13.6	12.2	11.6	11.9
20	10.2	9.5	9.8	11.8	10.5	11.1	14.4	13.2	13.7	13.1	11.9	12.5
21	9.8	8.9	9.3	12.1	10.5	11.2	14.5	13.3	13.9	13.5	12.4	12.9
22	9.8	8.6	9.1	12.1	10.5	11.2	13.8	12.7	13.2	13.1	12.8	---
23	10.3	8.3	9.2	12.2	10.3	11.1	13.2	12.0	12.6	---	---	---
24	9.9	8.9	9.4	11.8	10.0	10.8	12.5	11.5	12.0	13.8	13.0	13.6
25	11.1	10.0	10.6	11.6	9.5	10.4	11.5	10.6	10.8	13.6	12.9	13.3
26	11.8	10.7	11.2	9.8	7.8	8.7	11.8	10.8	11.4	13.8	12.7	13.2
27	12.0	11.2	11.5	9.6	8.1	9.0	12.7	11.6	12.1	13.9	12.9	13.4
28	11.5	11.0	11.2	11.0	9.5	10.2	13.0	12.0	12.5	13.6	12.7	13.2
29	11.9	10.9	11.3	11.8	10.4	11.1	13.2	12.1	12.6	13.6	12.6	13.1
30	11.8	10.9	11.2	12.7	11.4	12.1	13.2	12.0	12.6	14.2	13.0	13.7
31	12.0	10.8	11.3	---	---	---	13.7	12.4	13.0	14.2	13.4	13.8
MONTH	12.0	8.0	10.0	12.7	7.8	10.7	14.5	10.6	12.5	14.6	10.8	13.1

CHRISTINA RIVER BASIN

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	14.1	13.6	13.9	15.3	13.8	14.6	11.9	10.8	11.4	10.8	10.2	10.6
2	14.1	13.7	13.9	15.1	13.8	14.5	11.4	10.5	11.1	10.4	9.2	9.7
3	14.0	13.6	13.8	15.1	14.1	14.6	11.3	10.3	10.8	9.6	8.7	9.3
4	13.9	13.5	13.7	15.2	13.9	14.6	10.4	10.1	10.2	9.9	8.5	9.1
5	14.5	13.4	14.0	14.4	12.8	13.6	11.1	10.1	10.6	10.0	8.7	9.3
6	14.5	13.9	14.3	14.6	12.0	13.2	11.5	10.3	10.8	10.4	8.6	9.4
7	14.5	13.8	14.2	14.5	11.9	13.2	11.4	10.0	10.7	10.2	8.3	9.1
8	14.5	13.8	14.1	14.1	11.3	12.6	11.4	9.8	10.4	10.0	8.3	9.1
9	14.5	13.5	14.0	13.9	10.3	12.0	9.9	9.4	9.7	11.4	9.6	10.4
10	14.2	13.3	13.8	14.8	10.9	12.6	10.4	9.5	9.9	11.9	9.9	10.8
11	14.5	13.4	14.0	13.5	10.6	12.1	11.3	9.3	10.2	10.8	9.2	10.0
12	14.3	13.3	13.8	15.1	11.5	13.2	11.3	9.4	10.2	10.0	9.0	9.5
13	14.4	13.1	13.8	14.4	12.0	13.2	11.6	9.0	10.2	9.0	8.3	8.7
14	14.4	13.2	13.8	13.1	12.4	12.6	10.6	9.0	9.7	9.0	8.0	8.5
15	14.1	12.8	13.5	13.7	12.5	13.0	10.2	9.6	9.8	10.2	8.6	9.3
16	13.2	12.1	12.7	13.7	11.9	12.7	12.1	9.9	11.0	10.7	8.9	9.8
17	14.0	12.5	13.3	12.3	11.2	11.8	12.9	11.1	11.9	10.9	9.0	9.9
18	15.3	13.3	14.3	11.1	10.5	10.9	12.8	10.5	11.5	9.8	8.9	9.3
19	15.3	13.9	14.6	12.5	10.8	11.6	12.6	9.7	11.0	10.2	8.9	9.4
20	15.0	13.4	14.2	12.8	10.9	11.8	12.8	9.3	10.8	8.9	8.3	8.5
21	14.4	12.6	13.5	11.3	9.1	10.0	12.2	8.6	10.2	9.1	8.5	8.8
22	12.9	11.8	12.3	11.4	10.0	10.9	12.9	8.5	10.4	9.9	8.9	9.4
23	13.9	11.8	12.7	12.0	11.1	11.6	12.8	9.1	10.9	9.6	8.2	8.8
24	13.9	11.5	12.7	11.7	10.9	11.2	12.4	8.9	10.5	9.3	7.8	8.5
25	14.4	11.7	13.0	11.5	10.6	11.2	11.2	8.4	9.7	9.6	7.9	8.7
26	13.6	12.1	12.9	12.3	11.4	11.8	10.8	8.6	9.7	9.9	7.9	8.9
27	14.4	12.1	13.2	12.4	11.1	11.8	10.6	9.6	10.1	10.5	8.4	9.4
28	14.5	12.4	13.5	12.3	10.7	11.5	10.3	9.8	10.1	10.8	8.7	9.7
29	14.9	12.9	14.0	11.1	10.7	10.9	10.5	10.2	10.4	10.6	8.1	9.3
30	---	---	---	11.2	10.4	10.8	10.7	10.3	10.5	10.4	8.0	9.1
31	---	---	---	11.3	10.1	10.6	---	---	---	9.6	7.9	8.6
MONTH	15.3	11.5	13.6	15.3	9.1	12.3	12.9	8.4	10.5	11.9	7.8	9.3

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.6	7.8	8.5	7.7	6.5	7.1	9.0	6.1	7.5	9.2	5.8	7.2
2	9.2	7.4	8.3	8.4	6.6	7.5	9.3	6.0	7.5	9.2	5.7	7.2
3	9.4	7.4	8.2	7.5	6.5	7.1	9.3	5.7	7.3	9.9	5.6	7.3
4	9.9	7.4	8.5	8.4	6.7	7.5	9.2	5.6	7.2	10.2	6.4	8.0
5	10.7	7.9	9.2	8.6	6.7	7.6	9.4	5.4	7.2	10.1	6.6	8.0
6	10.3	8.1	9.2	8.7	6.8	7.7	9.9	5.2	7.3	10.2	6.4	8.1
7	10.8	8.4	9.4	9.5	7.3	8.2	10.4	5.9	7.9	10.2	6.6	8.1
8	9.5	7.4	8.4	8.8	7.3	8.0	10.4	5.9	7.8	10.6	6.9	8.5
9	10.0	7.9	8.9	9.3	7.5	8.2	9.7	5.6	7.4	10.8	7.2	8.7
10	10.1	8.4	9.1	8.5	6.9	7.6	10.1	5.5	7.5	10.4	7.0	8.5
11	10.9	8.7	9.7	8.9	6.6	7.5	9.3	5.6	7.2	10.4	7.1	8.5
12	11.1	8.4	9.7	9.2	6.5	7.6	8.7	5.4	6.9	10.7	7.6	8.8
13	11.2	8.4	9.7	10.2	6.7	8.2	9.0	5.9	7.3	10.8	7.3	8.9
14	11.1	8.0	9.5	9.3	7.0	8.0	9.5	6.3	7.7	9.7	6.8	8.1
15	10.5	7.5	8.8	9.3	6.7	7.8	8.7	6.2	7.2	9.9	6.5	8.1
16	8.3	7.3	7.8	9.0	6.7	7.4	9.0	6.3	7.5	9.3	6.9	8.1
17	9.5	7.8	8.6	6.5	5.9	6.2	9.3	7.0	8.0	9.7	7.2	8.3
18	9.7	7.9	8.8	6.8	5.9	6.4	8.5	7.1	7.7	9.1	6.9	8.0
19	9.9	8.0	8.9	7.3	6.2	6.7	8.6	7.0	7.6	9.7	6.9	8.2
20	9.6	7.7	8.6	7.6	6.4	6.9	9.2	6.9	7.9	9.9	7.2	8.5
21	9.9	7.8	8.8	7.9	6.0	6.7	9.1	6.9	7.8	9.9	6.9	8.3
22	10.0	7.5	8.7	8.1	5.8	6.7	9.2	7.0	7.9	9.6	6.5	8.0
23	10.3	7.4	8.7	6.6	5.9	6.2	9.3	7.0	7.9	9.1	6.1	7.6
24	9.9	7.2	8.5	8.0	6.1	6.9	9.4	7.0	8.0	9.7	6.4	8.0
25	9.7	7.0	8.2	8.6	6.6	7.5	9.8	6.9	8.1	8.1	6.7	7.2
26	8.9	6.8	7.8	9.0	6.7	7.7	10.5	6.7	8.3	8.7	6.7	7.6
27	9.0	6.7	7.8	9.1	6.5	7.6	10.7	6.9	8.6	9.5	7.5	8.5
28	9.0	6.5	7.6	9.1	6.3	7.5	11.4	6.7	8.8	10.2	8.1	9.1
29	8.0	6.4	7.1	8.8	6.3	7.4	11.1	6.6	8.4	10.0	8.1	8.7
30	7.3	6.4	6.9	9.6	6.0	7.6	10.6	6.4	8.1	---	---	---
31	---	---	---	9.7	6.3	7.8	8.9	6.4	7.4	---	---	---
MONTH	11.2	6.4	8.6	10.2	5.8	7.4	11.4	5.2	7.7	10.8	5.6	8.1

RESERVOIR IN CHRISTINA RIVER BASIN

01480684 **MARSH CREEK RESERVOIR**.--Lat 40°03'24", long 75°43'06", Chester County, Hydrologic Unit 02040205, on right bank at dam on Marsh Creek, 0.3 mi (0.5 km) upstream from mouth and 3.2 mi (5.1 km) north of Downingtown. DRAINAGE AREA, 20.1 mi^2 (52.1 km^2). PERIOD OF RECORD, November 1973 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Pennsylvania Department of Environmental Resources).

Reservoir formed by earthfill dam with concrete spillway at elevation 359.5 ft (109.58 m). Storage began November 1973. Total capacity 22,190 acre-ft (27.4 hm^3) at elevation 373 ft (113.69 m). Reservoir is used for water supply, flood control, and recreation. Figures given herein represent contents above lowest gate sill at elevation 289.5 ft (88.24 m). Records furnished by Pennsylvania Department of Environmental Resources.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 16,380 acre-ft (20.1 hm^3) Jan. 25, 1979, elevation, 363.49 ft (110.792 m); minimum (after first filling), 10,410 acre-ft (12.8 hm^3) Mar. 3, 1976, elevation, 351.75 ft (107.213 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 15,040 acre-ft (1.85 hm^3) May 1, elevation, 361.05 ft (110.048 m); minimum, 11,970 acre-ft (1.48 hm^3) Jan. 11, elevation, 355.12 ft (108.241 m).

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in cfs)	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in cfs)
	01480684 Marsh Creek Reservoir					
Sept. 30	359.83	14370	--			
Oct. 31	360.15	14540	+ 2.8			
Nov. 30	360.07	14500	- 0.7			
Dec. 31	356.75	12780	- 28.0			
CAL YR 1979	--	--	- .4			
Jan. 31	355.95	12380	- 6.5			
Feb. 29	357.05	12940	+ 9.7			
Mar. 31	360.78	14890	+ 31.7			
Apr. 30	360.93	14970	+ 1.3			
May 31	360.00	14460	- 8.3			
June 30	359.73	14310	- 2.5			
July 31	359.26	14050	- 4.2			
Aug. 31	358.93	13880	- 2.8			
Sept. 30	358.32	13570	- 5.2			
WTR YR 1980	--	--	- 1.1			

01481500 BRANDYWINE CREEK AT WILMINGTON, DE

LOCATION.--Lat 39°46'09", long 75°34'25", New Castle County, Hydrologic Unit 02040205, on right bank in Rockford Park, 0.2 mi (0.3 km) downstream from Henry Clay Bridge, in Wilmington, and 4.2 mi (6.8 km) upstream from mouth.

DRAINAGE AREA.--314 mi^2 (813 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1946 to current year. Prior to December 1946 monthly discharge only, published in WSP 1302.

REVISED RECORDS.--WSP 1432: 1948, 1950.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 68.23 ft (20.797 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those for August and September, which are fair. Some diurnal fluctuation at low flow caused by mills above station. Flow regulated since November 1973 by Marsh Creek Reservoir, capacity 22,190 acre-ft (27.4 hm^3), about 27 mi (43 km) upstream. No diversion just above station by plant of E. I. du Pont de Nemours & Co. since June 13, 1960.

AVERAGE DISCHARGE.--34 years, 486 ft^3/s (13.76 m^3/s), 21.02 in/yr (534 mm/yr), adjusted for storage since November 1973.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 29,000 ft^3/s (821 m^3/s) June 23, 1972, gage height, 15.49 ft (4.721 m), from rating curve extended above 18,000 ft^3/s (510 m^3/s); minimum, about 30 ft^3/s (0.85 m^3/s) Dec. 26, 1948, during period of ice effect; minimum daily, 56 ft^3/s (1.59 m^3/s) Aug. 23, 24, 1957.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft^3/s (110 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 10	1530	4,310	122	6.49	1.978	Mar. 21	2330	*5,090	144	7.06	2.152
Nov. 26	1700	4,730	134	6.80	2.073	Mar. 31	2045	4,750	135	6.84	2.085

Minimum daily discharge, 91 ft^3/s (2.58 m^3/s) Sept. 16, 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1320	530	609	445	319	261	2790	2670	615	373	266	162
2	1290	526	586	436	343	296	1650	1330	521	315	224	128
3	1070	1730	553	422	338	327	1220	1130	491	300	192	117
4	810	995	582	410	338	319	1380	972	472	310	196	114
5	761	711	577	420	333	335	1170	829	427	290	176	112
6	1530	654	576	411	320	356	959	766	418	281	173	110
7	764	634	654	396	324	324	861	734	427	263	176	106
8	694	599	581	409	324	350	794	801	472	250	163	105
9	665	568	532	403	318	441	1130	717	463	263	155	104
10	2990	793	533	378	326	380	1260	653	472	281	150	102
11	1850	810	516	613	311	457	936	650	454	258	176	101
12	1220	1130	512	1870	315	370	801	823	410	245	215	99
13	1170	775	599	640	300	412	757	1420	394	233	185	98
14	919	727	696	511	301	1170	760	926	378	229	153	96
15	816	690	559	501	311	767	1030	691	378	221	148	93
16	765	677	529	454	357	696	808	624	567	229	152	91
17	737	630	543	427	389	706	707	581	442	719	144	91
18	716	619	473	445	306	1480	672	704	378	298	144	144
19	652	587	478	779	316	794	607	720	364	245	146	112
20	629	575	485	564	309	589	587	953	364	221	148	106
21	613	557	466	482	319	2030	567	848	358	229	142	104
22	595	545	490	463	367	2360	545	794	342	215	134	102
23	591	538	514	511	440	911	534	637	326	315	132	104
24	1010	523	532	463	391	794	532	577	320	276	131	97
25	684	513	1090	436	362	1250	525	566	315	221	132	97
26	616	2380	829	427	339	847	536	513	315	205	128	112
27	580	1620	564	418	318	714	607	464	305	201	125	128
28	624	800	504	402	311	655	1660	443	295	186	128	104
29	649	698	481	386	301	1130	1970	434	362	205	125	99
30	574	645	468	353	---	1030	1220	412	540	194	122	97
31	547	---	446	320	---	2410	---	457	---	190	131	---
TOTAL	28451	23779	17557	15595	9626	24961	29575	24839	12385	8261	4912	3235
MEAN	918	793	566	503	332	805	986	801	413	266	158	108
MAX	2990	2380	1090	1870	440	2410	2790	2670	615	719	266	162
MIN	547	513	446	320	300	261	525	412	295	186	122	91
(†)	2.7	-0.7	-28.0	-6.5	9.7	31.7	1.3	-8.3	-2.5	-4.2	-2.8	-5.2
MEAN‡	921	782	538	497	322	837	987	793	411	262	155	103
CFSM‡	2.93	2.52	1.71	1.58	1.03	2.67	3.14	2.53	1.31	0.83	0.49	0.33
IN‡	3.38	2.81	2.18	1.82	1.17	3.07	3.51	2.91	1.46	0.96	0.57	0.36

CAL YR 1979 TOTAL 326962 MEAN 896 MAX 12100 MIN 246 CFSM 2.85 IN 38.74
WTR YR 1980 TOTAL 203176 MEAN 555 MAX 2990 MIN 91 CFSM 1.77 IN 24.07

† Change in contents in Marsh Creek Reservoir, equivalent in cubic feet per second, furnished by Pennsylvania Department of Environmental Resources.

‡ Adjusted for change in reservoir contents.

01481500 BRANDYWINE CREEK AT WILMINGTON, DE

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1947 to September 1980 (discontinued).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: November 1956 to September 1961, February 1971 to September 1973, October 1974 to September 1980 (discontinued).
SUSPENDED-SEDIMENT DISCHARGE: December 1946 to September 1961, July 1962 to September 1980 (discontinued).

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: (Water years 1957-61, 1972-73, 1976-78): Maximum daily, 30.5°C July 18, 19, 1977; minimum daily, 0.0°C on many days during winter periods.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,700 mg/L Feb. 14, 1966; minimum daily mean, 1 mg/L on many days.
SEDIMENT LOADS: Maximum daily, 35,700 tons (32,400 tonnes), Feb. 14, 1971; minimum daily, less than 0.25 ton (0.23 tonne) Sept. 15, 16, 17, 1980.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 410 mg/L Mar. 22; minimum daily mean, 1 mg/L Sept. 15, 16, 17.
SEDIMENT LOADS: Maximum daily, 2,610 tons (2,370 tonnes) Mar. 22; minimum daily, 0.25 ton (0.23 tonne) Nov. 9, 10.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE, WATER (DEG C)	COLOR (PLAT-INUM COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
DEC 14...	1100	670	181	6.2	12.5	6.0	7	12.6	65	25	16	6.1
APR 01...	1110	2510	138	6.7	17.0	6.5	20	12.3	40	18	12	4.6
JUN 02...	1220	544	197	7.0	32.0	21.3	4	8.7	69	25	17	6.4
SEP 08...	1115	110	297	7.0	22.0	22.9	5	--	100	37	25	9.7

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
DEC 14...	8.8	31	.5	2.2	40	20	13	.1	10	114	100
APR 01...	6.5	21	.4	2.4	31	16	9.3	.1	7.7	90	77
JUN 02...	8.7	21	.5	2.0	44	19	12	.2	9.7	135	102
SEP 08...	15	23	.6	3.7	65	26	19	.3	10	176	148

01481500 BRANDYWINE CREEK AT WILMINGTON, DE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, TOTAL (MG/L AS PO4)	IRON, TOTAL (UG/L AS FE)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL (UG/L AS MN)	MANGA- NESE, SUS- PENDED RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
DEC											
14...	.16	206	2.4	.140	.43	330	270	60	50	0	50
APR											
01...	.12	610	1.5	.110	.34	3900	3900	40	170	140	30
JUN											
02...	.18	198	2.3	.100	.31	100	40	60	30	0	30
SEP											
08...	.24	52.3	1.5	.310	.95	440	410	30	90	50	40

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.0	10.5	5.0	---	---	---	---	14.0	---	24.0	26.5	31.0
2	18.0	13.5	---	3.5	---	---	12.0	17.0	24.0	27.0	27.5	32.0
3	19.0	13.0	5.0	4.0	---	---	12.0	17.5	22.0	25.5	29.0	28.0
4	19.0	11.0	6.0	1.5	---	---	12.5	---	21.5	26.0	27.0	---
5	18.0	---	7.0	---	---	---	12.0	21.0	21.5	26.0	30.0	31.0
6	16.0	---	7.0	2.0	---	6.0	---	21.0	22.5	---	29.5	---
7	---	---	8.0	2.0	---	7.5	13.5	20.5	19.5	---	30.0	25.0
8	---	10.5	6.0	2.5	---	---	15.0	---	---	23.0	29.5	23.5
9	14.0	---	---	2.5	---	9.0	14.0	15.5	20.0	25.0	29.5	24.0
10	9.5	---	6.0	1.5	---	10.5	16.0	16.5	18.0	25.5	30.0	---
11	10.0	---	7.5	4.5	---	7.0	15.5	16.0	18.0	26.5	29.0	22.5
12	11.5	---	9.0	---	---	5.5	15.5	17.0	19.0	26.0	28.5	22.5
13	12.0	10.0	7.0	---	---	---	---	20.0	20.0	25.5	27.0	23.5
14	18.0	10.0	6.5	6.0	---	3.5	13.0	19.0	21.0	27.0	26.0	---
15	11.5	9.0	---	7.0	3.0	4.0	10.5	19.0	---	27.0	26.5	---
16	---	8.5	6.0	7.0	3.0	---	10.5	---	20.5	28.0	24.5	21.5
17	---	8.5	2.5	5.5	---	8.0	11.0	19.0	21.5	27.0	---	22.0
18	15.0	7.5	1.0	5.5	2.0	8.0	14.5	17.0	20.0	27.5	23.0	23.0
19	15.0	10.0	.5	6.0	3.0	9.5	16.0	18.0	21.5	---	28.5	---
20	15.5	9.0	1.0	5.0	4.5	10.0	16.5	18.0	20.5	29.0	25.0	21.0
21	---	10.0	2.0	4.0	---	11.5	12.0	16.5	20.5	30.0	24.0	22.0
22	12.0	---	5.0	3.5	6.0	7.0	17.0	---	---	29.5	23.5	26.0
23	---	---	6.5	4.0	8.0	9.5	16.0	21.5	22.0	27.0	---	25.0
24	---	---	---	1.0	3.0	10.0	---	23.0	24.0	25.5	25.5	23.0
25	12.0	---	---	2.0	6.5	8.0	18.0	---	25.5	26.0	26.5	20.0
26	10.0	15.5	7.5	1.5	4.0	8.5	---	21.0	24.0	27.0	27.0	19.0
27	10.0	13.0	5.5	---	3.5	9.5	12.5	20.0	25.5	27.0	28.0	---
28	10.0	11.0	5.5	3.0	---	9.5	12.0	20.0	25.0	27.0	27.5	26.0
29	10.0	8.5	---	2.0	---	10.0	12.0	19.0	25.0	27.0	28.0	18.0
30	10.0	5.0	---	1.0	---	11.0	11.5	20.5	24.0	28.0	26.5	19.5
31	9.5	---	5.5	1.5	---	8.0	---	20.5	---	28.0	---	---
MEAN	13.5	10.0	5.5	3.5	4.0	8.5	13.5	19.0	22.0	26.5	27.5	24.0

DELAWARE RIVER BASIN

01481500 BRANDYWINE CREEK AT WILMINGTON, DE

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L) OCTOBER	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L) NOVEMBER	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L) DECEMBER	SEDIMENT DISCHARGE (TONS/DAY)
1	1320	47	290	530	5	7.2	609	2	3.3
2	1290	63	219	526	8	11	586	3	4.7
3	1070	52	171	1730	236	1420	553	3	4.5
4	810	24	52	995	28	75	582	4	6.3
5	761	27	55	711	12	23	577	3	4.7
6	1530	120	496	654	9	16	576	3	4.7
7	764	22	45	634	7	12	654	5	8.8
8	694	12	22	599	6	9.7	581	4	6.3
9	665	11	20	568	5	7.7	532	3	4.3
10	2990	180	1790	793	15	32	533	2	2.9
11	1850	65	325	810	10	22	516	2	2.8
12	1220	23	76	1130	30	92	512	4	5.5
13	1170	26	82	775	8	17	599	7	11
14	919	12	30	727	5	9.8	696	7	13
15	816	9	20	690	6	11	559	5	7.5
16	765	7	14	677	5	9.1	529	3	4.3
17	737	6	12	630	5	8.5	543	5	7.3
18	716	6	12	619	4	6.7	473	4	5.1
19	652	5	8.8	587	4	6.3	478	6	7.7
20	629	4	6.8	575	5	7.8	485	4	5.2
21	613	4	6.6	557	5	7.5	466	3	3.8
22	595	4	6.4	545	5	7.4	490	4	5.3
23	591	4	6.4	538	5	7.3	514	5	6.9
24	1010	25	68	523	5	7.1	532	6	8.6
25	684	7	13	513	7	9.7	1090	65	191
26	616	3	5.0	2380	194	2180	829	36	81
27	580	3	4.7	1620	90	394	564	9	14
28	624	4	6.7	800	9	19	504	4	5.4
29	649	4	7.0	698	6	11	481	3	3.9
30	574	5	7.7	645	3	5.2	468	3	3.8
31	547	5	7.4	---	---	---	446	3	3.6
TOTAL	28451	---	3885.5	23779	---	4452.0	17557	---	447.2

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L) JANUARY	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L) FEBRUARY	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L) MARCH	SEDIMENT DISCHARGE (TONS/DAY)
1	445	3	3.6	319	4	3.4	261	5	3.5
2	436	2	2.4	343	4	3.7	296	4	3.2
3	422	2	2.3	338	4	3.7	327	4	3.5
4	410	2	2.2	338	4	3.7	319	5	4.3
5	420	2	2.3	333	3	2.7	335	5	4.5
6	411	2	2.2	320	3	2.6	356	5	4.8
7	396	3	3.2	324	3	2.6	324	6	5.2
8	409	4	4.4	324	3	2.6	350	6	5.7
9	403	4	4.4	318	3	2.6	441	6	7.1
10	378	5	5.1	326	2	1.8	380	4	4.1
11	613	45	74	311	2	1.7	457	8	9.9
12	1870	150	757	315	2	1.7	370	8	8.0
13	640	10	17	300	3	2.4	412	15	17
14	511	6	8.3	301	4	3.3	1170	70	221
15	501	7	9.5	311	4	3.4	767	26	54
16	454	5	6.1	357	6	5.8	696	10	19
17	427	4	4.6	369	5	5.0	706	7	13
18	445	6	7.2	306	5	4.1	1480	120	480
19	779	18	38	316	5	4.3	794	36	77
20	564	6	9.1	309	4	3.3	589	9	14
21	482	5	6.5	319	4	3.4	2030	224	2320
22	463	5	6.3	367	6	5.9	2360	410	2610
23	511	6	8.3	440	8	9.5	911	58	143
24	463	4	5.0	391	7	7.4	794	7	15
25	436	5	5.9	362	7	6.8	1250	57	192
26	427	8	9.2	339	7	6.4	847	14	32
27	418	6	6.8	318	5	4.3	714	8	15
28	402	6	6.5	311	5	4.2	655	6	11
29	386	4	4.2	301	5	4.1	1130	28	85
30	353	4	3.8	---	---	---	1030	21	58
31	320	4	3.5	---	---	---	2410	234	2460
TOTAL	15595	---	1028.9	9626	---	116.4	24961	---	8899.8

01481500 BRANDYWINE CREEK AT WILMINGTON, DE

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L) APRIL	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L) MAY	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L) JUNE	SEDIMENT DISCHARGE (TONS/DAY)
1	2790	185	1390	2670	232	1810	615	10	17
2	1650	62	276	1330	50	180	521	11	15
3	1220	21	69	1130	23	70	491	15	20
4	1380	52	210	972	18	47	472	13	17
5	1170	32	101	829	15	34	427	11	13
6	959	10	26	766	13	27	418	9	10
7	861	8	19	734	11	22	427	10	12
8	794	7	15	801	14	30	472	11	14
9	1130	30	92	717	12	23	463	10	13
10	1260	31	105	653	10	18	472	11	14
11	936	12	30	650	9	16	454	9	11
12	801	10	22	823	23	51	410	7	7.7
13	757	9	18	1420	98	389	394	8	8.5
14	760	9	18	926	53	133	378	6	6.1
15	1030	30	83	691	19	35	378	9	9.2
16	808	10	22	624	12	20	567	25	38
17	707	7	13	581	9	14	442	20	24
18	672	7	13	704	20	38	378	11	11
19	607	6	9.8	720	23	45	364	14	14
20	587	5	7.9	953	137	391	364	16	16
21	567	6	9.2	848	56	129	358	13	13
22	545	6	8.8	794	26	56	342	12	11
23	534	4	5.8	637	14	24	326	14	12
24	532	5	7.2	577	13	20	320	9	7.8
25	525	6	8.5	566	12	18	315	9	7.7
26	536	6	8.7	513	10	14	315	10	8.5
27	607	10	16	464	12	15	305	9	7.4
28	1660	222	1130	443	11	13	295	8	6.4
29	1970	176	973	434	9	11	362	13	13
30	1220	73	272	412	8	8.9	540	20	29
31	---	---	---	457	15	19	---	---	---
TOTAL	29575	---	4978.9	24839	---	3720.9	12385	---	406.3

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L) JULY	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L) AUGUST	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L) SEPTEMBER	SEDIMENT DISCHARGE (TONS/DAY)
1	373	18	18	266	13	9.3	162	12	5.2
2	315	13	11	224	12	7.3	128	11	3.8
3	300	11	8.9	192	10	5.2	117	8	2.5
4	310	14	12	196	10	5.3	114	7	2.2
5	290	13	10	176	11	5.2	112	7	2.1
6	281	12	9.1	173	11	5.1	110	7	2.1
7	263	11	7.8	176	10	4.8	106	7	2.0
8	250	10	6.8	163	9	4.0	105	6	1.7
9	263	11	7.8	155	9	3.8	104	5	1.4
10	281	10	7.6	150	10	4.1	102	4	1.1
11	258	9	6.3	176	12	5.7	101	3	.82
12	245	13	8.6	215	14	8.1	99	4	1.1
13	233	14	8.8	185	11	5.5	98	3	.79
14	229	14	8.7	153	11	4.5	96	2	.52
15	221	13	7.8	148	10	4.0	93	1	.25
16	229	15	9.3	152	9	3.7	91	1	.25
17	719	75	146	144	10	3.9	91	1	.25
18	298	50	40	144	11	4.3	144	11	4.3
19	245	25	17	146	10	3.9	112	7	2.1
20	221	15	9.0	148	9	3.6	106	5	1.4
21	229	10	6.2	142	10	3.8	104	6	1.7
22	215	10	5.8	134	11	4.0	102	5	1.4
23	315	25	21	132	10	3.6	104	5	1.4
24	276	21	16	131	9	3.2	97	7	1.8
25	221	18	11	132	10	3.6	97	6	1.6
26	205	12	6.6	128	9	3.1	112	8	2.4
27	201	13	7.1	125	8	2.7	128	5	1.7
28	186	11	5.5	128	7	2.4	104	3	.84
29	205	10	5.5	125	8	2.7	99	5	1.3
30	194	10	5.2	122	9	3.0	97	3	.79
31	190	10	5.1	131	10	3.5	---	---	---
TOTAL	8261	---	455.5	4912	---	136.9	3235	---	50.81

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DE

LOCATION.--Lat 39°41'21", long 75°31'19", New Castle County, Hydrologic Unit 02040205, at tidal gaging station located on channel side of west tower of south bridge between Pigeon Point, DE, and Deepwater Point, NJ.

DRAINAGE AREA.--11,030 mi^2 (28,600 km^2).

PERIOD OF RECORD.--July 1955 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1963 to current year.
pH: January 1968 to current year.
WATER TEMPERATURES: October 1956 to current year.
DISSOLVED OXYGEN: November 1962 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 12,700 micromhos Nov. 13, 1966; minimum, 100 micromhos on many days.
pH: Maximum, 9.3 Nov. 10-11, 13, 1970; minimum, 4.2 Nov. 6, 1969.
WATER TEMPERATURES: Maximum, 31.0°C Aug. 9, 1968; minimum, freezing point on many days during winter months.
DISSOLVED OXYGEN: Maximum, 13.7 mg/L Feb. 8 and 9, 1980; minimum, 0.0 mg/L on many days during summer months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	BICARBONATE (MG/L AS HCO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)
MAY 22...	0855	413	6.4	81	51	17	9.4	52	2.8	37	30	24
SEP 03...	0845	6800	6.9	--	--	--	--	--	--	60	49	12

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE DISSOL. (MG/L AS P)	PHOSPHORUS, ORTHOPHOSPHATE DISSOL. (MG/L AS PO4)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)
MAY 22...	41	77	.3	250	220	.34	.42	.000	.00	4	30	<1
SEP 03...	390	2200	--	--	--	--	2.5	--	--	--	--	--

DATE	CADMIUM DISSOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, DISSOLVED (UG/L AS CO)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, DISSOLVED (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, DISSOLVED (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)
MAY 22...	<1	<10	<10	<3	30	<10	20	28	23000	60	6	25
SEP 03...	--	--	--	--	--	--	--	--	--	--	--	--

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY											
22...	940	.00	29	0	99	<6.0	13	91	2.8	42	.0
SEP											
03...	--	--	--	--	--	--	--	--	3.9	--	--

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY											
22...	.0	7	12	10	.0	.0	.0	.0	.0	.0	.0
SEP											
03...	--	--	--	--	--	--	--	--	--	--	--

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY											
22...	.0	.0	.0	.0	.0	.0	.0	.0	.00	.0	0
SEP											
03...	--	--	--	--	--	--	--	--	--	--	--

DATE	BENZENE TOTAL (UG/L)	CARBONTETRACHLORIDE TOTAL (UG/L)	CHLORODIBROMOMETHANE TOTAL (UG/L)	CHLOROFORM TOTAL (UG/L)	DICHLOROBROMOMETHANE TOTAL (UG/L)	1,1-DICHLOROETHANE TOTAL (UG/L)	1,2-DICHLOROETHANE TOTAL (UG/L)	1,2-DICHLOROPROPANE TOTAL (UG/L)	TETRACHLOROETHYLENE TOTAL (UG/L)	1,1,1-TRICHLOROETHANE TOTAL (UG/L)	TRICHLOROETHYLENE TOTAL (UG/L)
MAY											
22...	--	--	--	--	--	--	--	--	--	--	--
SEP											
03...	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DE--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	1580	390	755	1450	350	751	370	280	312	1070	300	568
2	1080	360	578	1490	350	805	360	260	298	1060	290	562
3	740	390	495	1600	350	733	400	210	295	1130	300	583
4	---	---	---	1600	370	754	430	250	315	1230	320	615
5	---	---	---	1570	390	720	460	210	307	1240	330	630
6	---	---	---	1390	370	670	390	240	302	1300	330	749
7	---	---	---	1160	400	632	340	220	265	1300	290	776
8	---	---	---	1090	330	560	330	210	248	750	280	470
9	---	---	---	1070	290	524	290	240	268	1020	300	588
10	---	---	---	740	270	467	290	240	266	1090	320	629
11	---	---	---	630	270	394	300	220	260	1250	330	774
12	280	150	203	590	260	401	270	200	233	830	300	461
13	270	150	190	660	300	441	280	200	233	600	210	388
14	---	---	---	470	320	375	310	190	225	830	300	510
15	---	---	---	990	330	447	340	170	227	1130	240	545
16	---	---	---	710	290	406	460	170	245	1650	250	698
17	---	---	---	1040	240	460	420	170	199	2290	270	910
18	370	230	262	890	230	424	740	180	299	2230	270	986
19	660	220	304	1150	240	569	1050	170	420	1920	250	766
20	650	210	325	1420	240	610	1250	180	544	1570	250	655
21	670	210	320	1390	240	648	1140	190	579	1690	250	705
22	760	210	381	1590	250	746	1480	190	637	1620	260	715
23	1320	260	547	1480	250	771	1500	210	711	1930	290	886
24	1010	280	535	1630	260	802	1530	220	791	1090	270	603
25	860	310	484	1670	270	877	1520	260	926	1110	300	632
26	800	310	487	2720	240	1140	1270	210	659	970	310	581
27	980	320	534	1280	250	599	990	210	512	1070	300	626
28	950	320	551	710	260	391	800	270	408	1140	330	667
29	1000	330	566	370	270	303	630	270	372	1250	320	633
30	1300	360	627	360	290	315	790	280	448	880	310	523
31	1260	350	646	---	---	---	1050	290	534	1260	330	644
MONTH	1580	150	463	2720	230	591	1530	170	398	2290	210	648

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1040	320	564	4130	1510	2820	230	210	219	---	---	---
2	1240	330	585	4370	1650	3060	250	210	228	---	---	---
3	1400	330	711	4470	1820	3260	320	230	248	---	---	---
4	2520	360	1060	6200	2350	4070	270	230	249	---	---	---
5	2550	370	1290	6760	2810	4630	260	240	248	---	---	---
6	3230	540	1740	6910	2320	4450	350	240	270	---	---	---
7	4380	900	2370	6540	2720	4570	860	260	310	---	---	---
8	5030	1000	2770	7460	3250	---	300	260	280	---	---	---
9	5860	1170	3410	---	---	---	380	180	269	---	---	---
10	5950	1490	3450	---	---	---	230	170	184	---	---	---
11	6710	1570	4060	---	---	---	180	160	170	---	---	---
12	6360	1540	3870	---	---	---	260	170	178	---	---	---
13	6390	1800	3950	---	---	---	310	180	197	410	190	246
14	6290	1810	3870	---	---	---	580	170	195	590	180	253
15	6010	1650	3710	---	---	---	230	170	189	500	190	246
16	7340	2190	4320	---	---	---	190	170	176	560	190	276
17	6030	1830	3820	---	---	---	190	170	174	600	200	291
18	6230	1840	3900	---	---	---	210	160	179	700	210	350
19	6190	2000	3970	---	---	---	190	160	171	630	210	310
20	6260	2100	4190	---	---	---	190	160	167	480	210	297
21	6710	2530	4710	---	---	---	230	150	174	600	210	329
22	6770	2610	4530	---	---	---	190	160	173	560	210	305
23	6350	2830	4480	---	---	---	190	160	173	440	210	284
24	6220	2520	4270	300	230	264	200	150	176	620	220	346
25	6180	2480	4230	280	220	253	210	170	177	780	220	374
26	5940	1940	3900	240	200	221	240	170	187	810	210	394
27	6460	2270	4140	260	190	217	270	180	201	960	230	434
28	5300	1830	3540	330	200	231	280	180	197	1110	230	524
29	5050	1670	3300	340	190	216	---	---	---	1550	240	645
30	---	---	---	280	200	229	---	---	---	1870	260	814
31	---	---	---	330	210	225	---	---	---	2280	260	891
MONTH	7340	320	3270	7460	190	1910	860	150	206	2280	180	400

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DE--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	2220	280	982	4870	1300	2820	---	---	---	8190	4260	6160
2	2380	310	1100	4930	1390	2900	---	---	---	8600	4300	6200
3	2340	350	1250	4700	1370	2830	---	---	---	10100	4140	5950
4	2700	380	1250	4500	1370	2860	---	---	---	7930	4270	6000
5	2560	400	1340	4860	1530	3070	---	---	---	7330	4430	5850
6	2610	460	1410	4430	1330	2940	---	---	---	10000	4360	5840
7	2790	450	1510	4750	1450	2920	---	---	---	8280	4230	5870
8	2830	540	1580	4840	1500	3030	---	---	---	10300	4450	6310
9	2860	360	1400	5310	1530	2950	---	---	---	10000	4510	6500
10	3180	560	1570	5360	1670	3050	---	---	---	10100	4560	6440
11	3080	580	1600	4970	1750	3220	---	---	---	10100	4320	6280
12	2950	590	1650	5730	1770	3340	---	---	---	7730	4290	5960
13	3430	660	1810	5710	1870	3480	5720	2510	4050	8420	4650	6310
14	3340	720	1870	5490	1830	3530	7230	2580	4590	10100	4880	6620
15	3660	740	2090	5890	2120	3670	6280	2600	4360	10000	4770	6610
16	3630	840	2020	5200	1870	3510	6110	2550	4320	10000	5130	6980
17	3340	860	1990	4720	1820	3310	6640	2810	4580	10400	5100	7250
18	3800	1030	2190	4350	1900	3270	6710	3140	4790	10100	4080	6190
19	3190	970	2120	4450	1980	3340	7230	3080	4860	10000	4050	6000
20	3470	1120	2250	4320	2050	3260	7460	2890	4980	10000	4230	6040
21	3740	1150	2480	4340	1880	3110	8700	3380	5450	10300	4420	6170
22	4120	1170	2420	4150	1890	3000	8960	3520	5900	10300	4160	6390
23	3960	1210	2410	3940	1760	2920	10100	3360	5890	10400	4540	6950
24	3940	1200	2360	4910	1730	2910	10400	3540	6050	10500	4650	7260
25	3610	1180	2350	5090	1940	3260	9640	3570	6130	10600	5160	7910
26	3930	1260	2390	5030	1980	3370	10200	3670	6540	10600	4550	7470
27	4080	1330	2630	6000	2030	3590	10400	3840	6790	10100	4360	6840
28	4200	1260	2670	6220	2170	---	10500	4000	7420	10500	4490	7320
29	4650	1400	2800	---	---	---	10400	4240	7000	10500	4390	7130
30	4900	1220	2770	---	---	---	9800	4330	7270	10600	4900	7500
31	---	---	---	---	---	---	10300	4010	6620	---	---	---
MONTH	4900	280	1940	6220	1300	3170	10500	2510	5660	10600	4050	6540

PH (UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	6.6	6.2	6.4	6.7	6.2	6.4	6.5	6.3	6.4	6.9	6.5	6.7
2	6.5	6.2	6.3	6.6	6.2	6.4	6.4	6.3	6.3	6.9	6.5	6.7
3	6.4	6.1	6.2	6.5	6.2	6.4	6.5	6.3	6.4	6.9	6.5	6.7
4	6.4	6.1	6.2	6.7	6.2	6.4	6.5	6.4	6.4	6.7	6.4	6.5
5	6.4	6.1	6.2	6.6	6.2	6.4	6.6	6.4	6.5	6.8	6.5	6.6
6	6.3	6.2	6.2	6.6	6.2	6.3	6.6	6.5	6.5	7.1	6.5	6.8
7	6.4	6.2	6.3	6.5	6.2	6.3	6.6	6.4	6.5	6.9	6.5	6.7
8	6.4	6.2	6.3	6.5	6.2	6.3	6.6	6.3	6.5	7.1	6.6	6.9
9	6.4	6.3	6.4	6.5	6.2	6.3	6.6	6.3	6.5	7.0	6.6	6.8
10	6.4	6.3	6.3	6.5	6.2	6.3	6.6	6.3	6.5	7.0	6.6	6.8
11	6.3	6.2	6.3	6.4	6.2	6.3	6.6	6.4	6.5	7.1	6.5	6.9
12	6.5	6.3	6.4	6.5	6.3	6.4	6.6	6.3	6.4	7.1	6.6	6.8
13	6.5	6.3	6.4	6.5	6.3	6.4	6.6	6.3	6.4	6.8	6.5	6.6
14	---	---	---	6.5	6.3	6.4	6.6	6.3	6.5	7.2	6.5	6.8
15	---	---	---	6.6	6.3	6.4	6.6	6.3	6.5	7.0	6.7	---
16	---	---	---	6.6	6.4	6.5	6.8	6.3	6.6	7.2	6.6	6.8
17	---	---	---	6.7	6.4	6.5	6.8	6.2	6.4	7.1	6.5	6.8
18	6.4	6.3	6.3	6.7	6.4	6.5	6.8	6.2	6.5	7.0	6.5	6.8
19	6.4	6.2	6.3	6.7	6.4	6.5	6.8	6.3	6.6	7.1	6.5	6.8
20	6.5	6.2	6.3	6.7	6.4	6.5	6.9	6.3	6.6	7.1	6.4	6.7
21	6.5	6.1	6.3	6.7	6.3	6.5	6.9	6.4	6.7	6.9	6.3	6.6
22	6.5	6.1	6.3	6.8	6.3	6.5	7.3	6.4	6.8	6.8	6.3	6.6
23	6.6	6.1	6.3	6.7	6.3	6.5	7.4	6.6	7.0	7.0	6.3	6.8
24	6.5	6.2	6.3	6.8	6.3	6.5	7.3	6.5	7.0	6.7	6.3	6.5
25	6.6	6.2	6.3	6.8	6.3	6.6	7.3	6.5	6.9	6.7	6.3	6.5
26	6.5	6.2	6.3	7.0	6.4	6.7	7.0	6.5	6.8	6.8	6.4	6.6
27	6.6	6.2	6.4	6.8	6.4	6.6	6.9	6.4	6.7	6.8	6.3	6.6
28	6.6	6.2	6.4	6.6	6.3	6.5	6.9	6.4	6.7	6.8	6.4	6.7
29	6.6	6.2	6.4	6.4	6.3	6.3	6.9	6.5	6.7	6.9	6.4	6.6
30	6.6	6.2	6.4	6.4	6.2	6.3	7.2	6.5	6.9	6.7	6.3	6.5
31	6.6	6.2	6.4	---	---	---	7.1	6.5	6.8	6.8	6.3	6.6
MONTH	6.6	6.1	6.3	7.0	6.2	6.4	7.4	6.2	6.6	7.2	6.3	6.7

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DE--Continued

PH (UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	6.8	6.3	6.5	7.1	6.6	6.9	6.8	6.2	6.4	---	---	---
2	6.9	6.4	6.6	7.1	6.7	6.9	7.0	6.3	6.6	---	---	---
3	7.0	6.4	6.7	7.3	6.8	7.1	6.8	6.4	6.6	---	---	---
4	7.2	6.5	6.8	7.4	7.0	7.3	6.8	6.4	6.7	---	---	---
5	7.3	6.6	6.9	7.4	7.0	7.2	6.8	6.5	6.7	---	---	---
6	7.1	6.6	6.8	7.5	7.0	7.3	6.9	6.6	6.7	---	---	---
7	7.2	6.7	7.0	7.5	7.0	7.2	6.7	6.5	6.6	---	---	---
8	7.4	6.8	7.1	7.5	7.1	---	6.8	6.5	6.6	---	---	---
9	7.2	6.9	7.1	---	---	---	6.6	6.5	6.6	---	---	---
10	7.3	6.8	7.1	---	---	---	6.6	6.4	6.5	---	---	---
11	7.2	6.8	7.1	---	---	---	6.6	6.4	6.5	---	---	---
12	7.2	6.9	7.1	---	---	---	6.6	6.4	6.5	---	---	---
13	7.3	6.8	7.1	---	---	---	6.5	6.4	6.5	6.7	6.4	6.6
14	7.4	6.8	7.1	---	---	---	6.7	6.4	6.4	6.7	6.2	6.4
15	7.3	6.9	7.1	---	---	---	6.7	6.4	6.5	6.5	6.1	6.3
16	7.4	6.9	7.1	---	---	---	6.5	6.4	6.4	6.6	6.1	6.4
17	7.2	6.8	7.0	---	---	---	6.5	6.3	6.4	6.6	6.2	6.4
18	7.2	6.8	7.0	---	---	---	6.5	6.3	6.4	6.7	6.2	6.4
19	7.3	6.8	7.1	---	---	---	6.5	6.3	6.4	6.7	6.3	6.4
20	7.4	6.9	7.2	---	---	---	6.5	6.3	6.4	6.5	6.2	6.4
21	7.5	6.9	7.2	---	---	---	6.5	6.3	6.4	6.5	6.3	6.4
22	7.2	6.9	7.1	---	---	---	6.5	6.3	6.3	6.8	6.3	6.5
23	7.4	7.0	7.2	---	---	---	6.4	6.3	6.4	6.7	6.4	6.5
24	7.3	7.0	7.2	6.6	6.5	6.6	6.4	6.3	6.4	6.7	6.4	6.6
25	7.2	6.8	7.0	6.6	6.4	6.5	6.5	6.3	6.4	6.7	6.4	6.5
26	7.1	6.7	6.9	6.5	6.4	6.5	6.4	6.3	6.4	6.6	6.3	6.5
27	7.1	6.8	7.0	6.5	6.3	6.4	6.4	6.2	6.3	6.6	6.3	6.5
28	7.2	6.7	7.0	6.5	6.2	6.4	6.4	6.3	6.3	6.7	6.3	6.5
29	7.1	6.7	6.9	6.6	6.2	6.4	---	---	---	6.8	6.3	6.5
30	---	---	---	6.7	6.3	6.5	---	---	---	6.8	6.3	6.5
31	---	---	---	6.3	6.2	6.2	---	---	---	6.8	6.3	6.5
MONTH	7.5	6.3	7.0	7.5	6.2	6.8	7.0	6.2	6.5	6.8	6.1	6.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	6.8	6.4	6.6	6.8	6.4	6.6	---	---	---	7.0	6.8	6.9
2	6.9	6.4	6.6	6.8	6.4	6.6	---	---	---	7.1	6.8	6.9
3	6.8	6.1	6.5	6.8	6.4	6.6	---	---	---	7.0	6.8	6.9
4	6.6	6.1	6.3	6.8	6.4	6.6	---	---	---	7.1	6.8	6.9
5	6.7	6.1	6.4	6.8	6.4	6.6	---	---	---	7.0	6.8	6.9
6	6.6	6.2	6.4	6.7	6.4	6.6	---	---	---	7.0	6.8	6.9
7	6.8	6.2	6.5	6.8	6.4	6.6	---	---	---	7.0	6.7	6.9
8	6.7	6.2	6.5	6.7	6.4	6.6	---	---	---	7.0	6.7	6.9
9	6.8	6.0	6.4	6.8	6.4	6.6	---	---	---	7.0	6.7	6.8
10	6.9	6.2	6.5	6.8	6.4	6.6	---	---	---	6.9	6.7	6.8
11	6.8	6.2	6.5	6.7	6.4	6.6	---	---	---	6.9	6.7	6.8
12	6.7	6.2	6.5	6.7	6.4	6.6	---	---	---	6.8	6.7	6.8
13	6.7	6.3	6.5	6.7	6.4	6.6	6.6	6.5	6.6	6.8	6.7	6.7
14	6.8	6.3	6.5	6.7	6.4	6.6	6.9	6.5	6.7	6.9	6.7	6.8
15	6.8	6.3	6.6	6.7	6.5	6.6	6.9	6.6	6.8	6.9	6.7	6.8
16	6.7	6.2	6.5	6.8	6.6	6.7	6.8	6.6	6.7	7.0	6.8	6.9
17	6.7	6.2	6.5	6.8	6.6	6.7	7.0	6.6	6.8	7.2	6.8	7.0
18	6.7	6.3	6.5	6.8	6.6	6.7	6.9	6.7	6.8	7.0	6.8	6.9
19	6.7	6.3	6.5	6.8	6.6	6.7	6.9	6.7	6.8	7.0	6.8	6.9
20	6.7	6.3	6.5	6.8	6.6	6.7	7.0	6.7	6.8	7.1	6.8	6.9
21	6.8	6.3	6.6	6.8	6.6	6.7	7.0	6.7	6.8	7.1	6.8	6.9
22	6.8	6.4	6.6	6.8	6.5	6.7	7.0	6.7	6.9	7.1	6.8	6.9
23	6.8	6.4	6.6	6.7	6.5	6.6	7.0	6.7	6.9	7.0	6.8	6.9
24	6.8	6.4	6.6	6.9	6.5	6.7	7.0	6.7	6.8	7.0	6.7	6.9
25	6.8	6.4	6.6	6.9	6.6	6.7	7.0	6.6	6.8	7.0	6.7	6.9
26	6.8	6.4	6.6	6.9	6.6	6.8	7.0	6.7	6.8	7.0	6.7	6.8
27	6.8	6.4	6.6	6.9	6.6	6.8	7.0	6.7	6.8	7.0	6.6	6.8
28	6.8	6.4	6.6	6.9	6.6	---	6.9	6.7	6.8	7.0	6.7	6.9
29	6.9	6.4	6.7	---	---	---	7.0	6.7	6.8	7.0	6.7	6.9
30	6.8	6.4	6.6	---	---	---	7.0	6.7	6.9	7.0	6.8	6.9
31	---	---	---	---	---	---	7.0	6.8	6.9	---	---	---
MONTH	6.9	6.0	6.5	6.9	6.4	6.7	7.0	6.5	6.8	7.2	6.6	6.9

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DE--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	20.5	20.0	20.5	13.5	13.0	13.0	10.5	10.0	10.5	5.0	4.5	5.0
2	22.0	20.0	20.5	14.0	13.0	13.5	10.0	9.5	10.0	5.0	4.5	5.0
3	23.5	20.5	21.5	14.0	13.0	13.5	9.5	8.5	9.0	5.0	4.5	4.5
4	21.0	20.0	20.5	13.5	13.0	13.5	9.0	8.0	8.5	4.5	4.0	4.0
5	20.5	20.0	20.0	13.5	13.0	13.0	8.5	8.0	8.5	4.0	3.5	3.5
6	20.0	19.5	20.0	13.5	12.5	13.0	8.5	8.0	8.0	3.5	3.0	3.5
7	20.5	18.0	19.0	13.0	12.5	13.0	8.5	8.0	8.5	3.5	3.0	3.0
8	18.0	17.5	18.0	13.0	12.0	12.5	8.5	7.5	8.0	3.5	3.0	3.0
9	17.5	17.0	17.5	13.0	12.5	12.5	8.0	7.0	7.5	3.0	3.0	3.0
10	17.0	16.0	16.5	13.0	12.5	13.0	8.0	7.0	7.5	3.0	2.5	3.0
11	16.0	15.0	15.5	13.0	12.5	13.0	8.0	7.0	7.5	3.5	2.5	3.0
12	15.5	15.0	15.5	13.0	12.5	12.5	8.0	7.0	7.5	3.5	3.0	3.5
13	15.0	15.0	15.0	12.5	12.0	12.5	8.0	7.5	7.5	3.5	2.5	3.0
14	---	---	---	12.5	12.0	12.0	8.0	7.0	7.5	3.5	2.5	3.0
15	---	---	---	12.0	11.0	11.5	7.5	6.5	7.0	5.0	3.0	4.0
16	---	---	---	11.5	11.0	11.5	7.5	6.5	7.0	5.0	3.5	4.0
17	---	---	---	11.0	10.5	11.0	7.5	5.5	6.5	4.5	4.0	4.5
18	14.5	14.0	14.5	11.0	10.5	11.0	6.0	5.0	6.0	5.0	4.0	4.5
19	15.0	14.0	14.5	11.0	10.5	10.5	6.0	5.0	5.5	5.0	4.5	4.5
20	15.5	14.0	15.0	11.0	10.5	11.0	5.0	4.0	4.5	5.0	4.5	4.5
21	15.5	14.5	15.0	11.0	10.5	11.0	4.5	4.0	4.5	5.0	4.0	4.5
22	16.0	15.0	15.5	11.0	10.5	11.0	5.0	4.0	4.5	5.0	4.0	4.5
23	16.0	15.0	15.5	11.5	11.0	11.0	5.0	4.5	4.5	5.0	4.0	4.5
24	16.0	15.0	15.5	11.5	11.0	11.5	5.0	4.5	5.0	4.5	3.5	4.0
25	15.0	14.5	15.0	12.0	11.5	11.5	5.5	5.0	5.0	4.0	3.5	4.0
26	14.5	14.0	14.5	12.5	11.5	12.0	5.5	5.0	5.5	4.0	3.5	4.0
27	14.0	13.5	14.0	12.5	12.0	12.5	5.5	5.0	5.5	4.0	3.0	3.5
28	14.0	13.5	13.5	12.5	12.0	12.5	5.5	5.0	5.0	4.0	3.0	3.5
29	13.5	13.0	13.5	12.0	11.0	11.5	5.5	5.0	5.0	4.0	2.5	3.5
30	13.5	13.0	13.0	11.5	10.5	11.0	5.5	4.5	5.0	3.5	2.0	3.0
31	13.5	13.0	13.0	---	---	---	5.0	4.5	5.0	3.0	1.5	2.5
MONTH	23.5	13.0	16.5	14.0	10.5	12.0	10.5	4.0	6.5	5.0	1.5	4.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.5	1.5	2.0	2.5	1.5	2.5	10.0	8.5	9.0	---	---	---
2	2.0	.5	1.5	2.0	1.0	1.5	10.5	9.0	9.5	---	---	---
3	1.5	.0	1.0	2.0	1.0	1.5	10.5	9.5	---	---	---	---
4	1.0	.0	.5	2.0	.5	1.5	10.0	9.5	---	---	---	---
5	1.0	.0	.5	2.5	1.5	2.0	10.5	9.5	10.0	---	---	---
6	1.0	.0	.5	3.5	1.5	2.5	11.0	10.0	10.5	---	---	---
7	1.0	.0	.5	3.5	2.0	2.5	11.5	10.5	11.0	---	---	---
8	1.0	.0	.5	3.5	2.5	---	12.0	11.0	11.5	---	---	---
9	1.0	.0	.5	---	---	---	12.5	11.5	12.0	---	---	---
10	1.0	.0	.5	---	---	---	---	---	---	---	---	---
11	1.0	.0	.5	---	---	---	---	---	---	---	---	---
12	1.5	.5	1.0	---	---	---	---	---	---	---	---	---
13	2.0	.5	1.0	---	---	---	---	---	---	18.0	17.5	18.0
14	2.0	1.0	1.5	---	---	---	---	---	---	18.0	17.5	18.0
15	2.0	1.0	1.5	---	---	---	---	---	---	18.5	18.0	18.0
16	2.0	1.5	1.5	---	---	---	---	---	---	18.5	18.0	18.5
17	2.0	1.0	1.5	---	---	---	---	---	---	19.0	18.5	18.5
18	2.0	1.0	1.5	---	---	---	---	---	---	19.0	18.5	18.5
19	2.0	1.0	1.5	---	---	---	---	---	---	19.5	18.5	19.0
20	2.5	1.5	2.0	---	---	---	---	---	---	19.5	19.0	19.0
21	3.0	1.5	2.5	---	---	---	---	---	---	19.5	19.0	19.0
22	3.0	2.0	2.5	---	---	---	---	---	---	20.0	19.0	19.5
23	3.5	2.5	3.0	---	---	---	---	---	---	20.5	19.5	20.0
24	4.0	3.0	3.5	10.0	9.5	9.5	15.5	15.0	---	21.0	20.0	20.5
25	4.0	3.0	3.5	10.0	9.5	9.5	15.5	15.0	15.5	21.5	20.5	21.0
26	4.0	3.0	3.5	9.5	8.5	9.0	15.5	15.0	15.0	21.0	20.5	21.0
27	3.5	2.5	3.0	9.5	8.0	9.0	15.0	14.5	15.0	21.0	20.5	20.5
28	3.5	2.5	3.0	9.5	8.0	9.0	15.0	14.0	14.5	21.0	20.5	20.5
29	3.0	2.0	3.0	9.0	8.0	9.0	---	---	---	21.0	20.5	21.0
30	---	---	---	9.5	8.5	9.0	---	---	---	21.5	20.5	21.0
31	---	---	---	9.0	8.5	9.0	---	---	---	21.5	21.0	21.5
MONTH	4.0	.0	1.5	10.0	.5	6.0	15.5	8.5	12.0	21.5	17.5	19.5

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DE--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	22.5	21.5	22.0	26.0	25.0	25.5	---	---	---	28.5	27.5	28.0
2	23.0	22.0	22.5	26.0	25.0	25.5	---	---	---	28.5	28.0	28.0
3	23.0	22.5	23.0	26.5	26.0	26.0	---	---	---	28.5	28.0	28.5
4	23.0	22.5	23.0	27.0	26.0	26.0	---	---	---	28.5	28.0	28.0
5	23.0	22.5	22.5	27.0	26.0	26.5	---	---	---	28.5	27.0	28.0
6	23.0	22.5	22.5	27.0	26.5	26.5	---	---	---	28.5	28.0	28.0
7	23.5	22.5	22.5	26.5	26.0	26.5	---	---	---	28.0	27.5	28.0
8	23.5	23.0	23.0	26.5	26.0	26.0	---	---	---	28.0	27.0	27.5
9	23.0	22.0	22.5	26.5	26.0	26.0	---	---	---	27.5	27.0	27.0
10	22.0	21.5	22.0	27.0	26.0	26.5	---	---	---	27.0	26.5	27.0
11	22.0	21.5	21.5	27.5	26.5	26.5	---	---	---	26.5	26.0	26.5
12	22.0	21.5	22.0	27.0	26.5	27.0	---	---	---	26.5	26.0	26.5
13	23.0	21.5	22.0	27.5	26.5	27.0	29.5	29.5	29.5	26.5	26.0	26.0
14	23.0	22.0	22.5	28.0	26.5	27.0	29.5	29.0	29.5	26.5	26.0	26.0
15	23.0	22.5	22.5	27.5	27.0	27.0	29.5	29.0	29.0	26.5	25.5	26.0
16	23.0	22.5	22.5	28.0	27.0	27.5	29.0	28.5	28.5	26.0	25.0	25.5
17	23.0	22.0	22.5	28.5	27.5	27.5	28.5	27.5	28.0	25.5	25.0	25.0
18	23.0	22.5	22.5	28.5	27.5	28.0	28.0	27.0	27.5	25.5	25.0	25.5
19	23.0	22.0	22.5	29.0	28.0	28.5	27.5	26.5	27.0	25.5	25.0	25.0
20	23.0	22.5	22.5	29.5	28.5	28.5	27.5	26.5	27.0	25.0	24.5	25.0
21	23.0	22.0	22.5	29.5	29.0	29.0	27.0	26.0	26.5	25.5	24.5	25.0
22	23.5	22.5	23.0	29.5	29.0	29.5	26.5	26.0	26.0	26.0	25.0	25.5
23	23.5	23.0	23.5	29.5	29.0	29.0	26.5	26.0	26.0	26.0	25.0	25.5
24	24.0	23.5	23.5	29.0	28.5	28.5	27.0	26.0	26.5	25.0	24.5	25.0
25	24.5	24.0	24.0	29.0	28.5	28.5	27.5	26.0	26.5	24.5	24.0	24.5
26	25.0	24.0	24.5	29.5	28.5	29.0	27.5	26.0	27.0	24.5	24.0	24.0
27	25.0	24.5	25.0	29.5	28.5	29.0	27.5	26.5	27.0	23.5	23.0	23.0
28	25.5	25.0	25.0	28.5	28.5	---	28.0	27.0	27.5	23.0	22.5	22.5
29	25.5	25.0	25.5	---	---	---	27.5	27.0	27.5	23.0	22.0	22.5
30	25.5	25.0	25.5	---	---	---	28.0	27.0	27.5	22.5	22.0	22.0
31	---	---	---	---	---	---	28.0	27.5	27.5	---	---	---
MONTH	25.5	21.5	23.0	29.5	25.0	27.5	29.5	26.0	27.5	28.5	22.0	26.0

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	4.3	2.7	3.6	7.8	5.9	6.8	8.5	6.6	7.3	10.6	9.0	9.7
2	3.8	1.8	2.9	7.7	5.8	6.8	8.2	6.8	7.4	10.4	8.9	9.5
3	4.6	.5	2.6	7.7	5.5	6.7	8.9	7.5	8.0	10.2	8.9	9.5
4	4.4	1.6	3.2	8.0	5.3	6.6	9.1	7.9	8.4	10.2	9.0	9.5
5	4.4	2.4	3.5	7.8	5.3	6.5	9.5	8.1	8.5	11.1	9.7	10.2
6	4.9	3.2	4.0	7.2	5.0	6.1	9.4	8.2	8.8	11.0	9.9	10.4
7	5.2	2.9	4.5	6.9	4.8	5.9	9.4	8.1	8.8	11.4	10.1	10.7
8	5.7	4.8	5.3	7.2	5.0	6.0	9.6	8.3	8.9	10.9	10.1	10.5
9	6.4	5.4	5.9	7.1	5.0	6.0	10.2	8.6	9.3	10.9	10.1	10.5
10	6.7	5.8	6.1	6.8	5.2	6.1	10.2	8.9	9.6	10.9	10.1	10.5
11	6.6	5.9	6.3	6.9	5.1	6.0	10.6	9.1	9.7	11.1	10.0	10.6
12	6.7	6.2	6.5	7.4	5.3	6.5	10.3	8.9	9.6	11.0	10.2	10.6
13	---	---	---	7.8	6.1	7.1	10.3	8.7	9.6	11.1	10.2	10.6
14	---	---	---	7.8	6.3	7.2	10.4	8.9	9.7	11.6	10.4	10.9
15	---	---	---	8.5	6.4	7.5	10.4	9.1	9.8	11.9	10.3	11.1
16	---	---	---	8.5	7.0	7.8	10.3	8.7	9.7	12.2	10.6	11.4
17	---	---	---	8.9	7.3	8.1	10.6	8.7	9.5	12.1	10.4	11.3
18	6.5	6.2	6.4	8.9	7.4	8.1	11.2	9.0	10.0	11.7	10.0	11.0
19	6.6	6.1	6.3	9.1	7.4	8.2	11.2	9.2	10.3	11.8	9.8	10.6
20	6.7	5.9	6.2	8.8	7.1	8.1	11.9	10.0	10.9	11.4	9.8	10.5
21	6.4	5.5	5.9	8.6	6.9	7.9	11.9	10.1	11.2	11.5	9.7	10.5
22	6.0	5.2	5.5	8.5	6 6	7.8	11.6	9.9	11.0	11.4	9.7	10.5
23	6.5	5.0	5.5	8.2	6.4	7.5	11.4	9.6	10.8	11.5	9.7	10.6
24	6.8	5.5	6.0	8.4	6.4	7.5	11.3	9.5	10.5	11.4	9.6	10.6
25	7.4	5.7	6.3	8.2	6.3	7.5	11.1	9.5	10.6	11.5	9.9	10.7
26	7.6	5.7	6.5	9.3	6.5	8.1	10.8	9.1	10.1	11.3	9.9	10.6
27	7.9	5.8	6.7	8.6	6.6	7.7	10.7	8.8	9.8	11.6	9.8	10.7
28	7.8	5.8	6.9	8.2	6.4	7.4	10.5	8.8	9.7	11.6	9.8	10.7
29	7.7	5.9	6.7	8.0	6.3	7.1	10.5	8.9	9.7	11.6	9.8	10.6
30	7.7	5.8	6.7	8.2	6.4	7.2	10.7	9.1	9.8	11.6	9.8	10.6
31	7.7	5.9	6.8	---	---	---	10.9	9.1	9.8	12.4	10.2	11.2
MONTH	7.9	.5	5.5	9.3	4.8	7.1	11.9	6.6	9.6	12.4	8.9	10.6

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DE--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	12.4	10.2	11.3	12.5	10.8	11.8	9.6	9.2	9.4	---	---	---
2	13.0	10.9	11.9	13.0	11.2	12.2	9.6	9.2	9.3	---	---	---
3	13.3	11.1	12.3	13.2	11.8	12.6	9.3	9.0	9.1	---	---	---
4	13.6	11.6	12.6	13.5	12.1	12.9	9.1	8.8	8.9	---	---	---
5	13.5	11.6	12.7	13.4	12.1	12.8	9.1	8.8	8.9	---	---	---
6	13.4	11.7	12.7	13.3	11.8	12.6	9.1	8.6	8.8	---	---	---
7	13.6	12.1	13.0	13.2	11.8	12.6	9.0	8.5	8.7	---	---	---
8	13.7	12.3	13.1	13.3	11.8	---	8.9	8.3	8.6	---	---	---
9	13.7	12.3	13.1	---	---	---	8.9	8.4	8.6	---	---	---
10	13.5	12.1	13.0	---	---	---	8.6	8.1	8.3	---	---	---
11	13.6	12.1	13.0	---	---	---	8.3	7.6	8.0	---	---	---
12	13.5	11.8	12.8	---	---	---	7.9	7.1	7.6	---	---	---
13	13.3	11.9	12.7	---	---	---	7.6	7.0	7.3	7.8	6.3	7.1
14	13.2	11.8	12.6	---	---	---	8.0	7.0	7.4	7.7	5.7	6.9
15	13.2	11.5	12.4	---	---	---	8.0	7.0	7.4	7.5	5.7	6.9
16	13.4	11.7	12.5	---	---	---	7.7	7.0	7.3	7.8	5.8	7.0
17	13.1	11.4	12.4	---	---	---	7.8	7.0	7.4	7.8	6.1	7.1
18	13.2	11.6	12.5	---	---	---	7.8	6.9	7.2	7.7	6.7	7.3
19	13.1	11.6	12.4	---	---	---	7.5	6.7	7.0	7.6	6.5	7.1
20	13.0	11.5	12.4	---	---	---	7.2	6.5	6.8	7.4	6.3	7.0
21	13.0	11.4	12.3	---	---	---	7.1	6.7	6.9	7.4	6.7	7.1
22	12.9	11.5	12.3	---	---	---	7.2	6.6	6.9	7.6	6.7	7.1
23	12.8	11.5	12.2	---	---	---	7.3	6.8	7.1	7.7	6.8	7.1
24	12.6	11.2	11.9	9.2	8.6	8.8	7.3	6.8	7.1	7.4	6.7	7.0
25	12.5	10.9	11.8	9.3	8.6	8.9	7.4	6.8	7.1	7.2	6.4	6.7
26	12.3	10.6	11.7	9.6	9.0	9.3	7.3	6.7	7.1	6.8	6.2	6.5
27	12.8	11.1	12.0	9.8	9.3	9.5	7.3	6.6	7.0	6.6	6.1	6.3
28	12.5	10.9	11.8	9.7	9.2	9.4	7.5	7.0	7.3	6.6	5.8	6.1
29	12.4	10.8	11.7	9.6	9.3	9.4	---	---	---	6.4	5.3	5.8
30	---	---	---	9.5	9.2	9.3	---	---	---	6.3	5.1	5.7
31	---	---	---	9.6	9.3	9.5	---	---	---	6.2	4.7	5.4
MONTH	13.7	10.2	12.4	13.5	8.6	10.8	9.6	6.5	7.8	7.8	4.7	6.7

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	5.8	4.3	5.1	5.3	3.2	4.4	---	---	---	5.2	4.2	4.8
2	5.6	4.1	4.9	5.3	3.3	4.4	---	---	---	5.3	4.2	4.8
3	5.7	3.9	4.9	4.9	2.9	4.0	---	---	---	5.3	4.2	4.7
4	5.7	3.7	4.9	4.5	2.5	3.7	---	---	---	5.5	4.2	4.8
5	5.9	3.7	5.0	4.7	2.5	3.7	---	---	---	5.3	4.3	4.8
6	5.8	3.6	4.9	4.8	2.7	3.8	---	---	---	5.3	4.3	4.8
7	5.7	3.3	4.8	5.0	3.2	4.1	---	---	---	5.4	4.2	4.8
8	6.0	3.6	4.8	5.0	3.4	4.3	---	---	---	5.7	4.3	5.0
9	6.7	3.2	5.2	5.2	3.3	4.2	---	---	---	5.6	4.3	5.1
10	6.7	4.3	5.5	5.1	3.1	4.0	---	---	---	5.8	4.6	5.3
11	6.4	4.1	5.4	4.9	2.9	3.8	---	---	---	6.3	4.6	5.4
12	6.3	3.9	5.3	4.8	2.8	3.8	---	---	---	6.2	4.7	5.5
13	6.1	3.7	5.1	4.8	3.0	3.9	6.4	4.3	4.7	6.2	4.9	5.6
14	6.1	3.7	5.1	4.9	2.9	4.0	5.3	4.1	4.7	6.3	5.1	5.6
15	5.8	3.7	4.8	4.9	3.3	4.3	5.1	4.0	4.6	6.0	4.9	5.5
16	5.5	3.5	4.7	5.0	3.6	4.4	5.3	4.0	4.7	6.1	5.1	5.7
17	5.3	3.4	4.6	4.8	3.5	4.3	5.8	4.5	5.1	6.4	5.3	5.8
18	5.6	3.7	4.7	4.8	3.4	4.2	5.6	4.6	5.1	6.1	5.1	5.7
19	5.7	3.5	4.8	4.8	3.2	4.0	5.4	4.4	5.0	6.0	5.0	5.5
20	6.0	4.1	5.1	4.7	3.2	4.0	5.6	4.3	4.9	6.1	4.9	5.5
21	6.4	3.9	5.4	4.6	3.2	4.0	5.7	4.5	5.1	5.9	4.9	5.5
22	6.3	4.1	5.4	4.7	3.3	4.0	5.7	4.6	5.2	5.8	4.7	5.3
23	6.2	4.1	5.2	4.6	3.4	4.1	5.5	4.2	5.0	5.7	4.6	5.2
24	5.9	4.0	5.1	5.2	3.3	4.2	5.5	4.0	4.8	6.0	4.6	5.4
25	5.7	4.0	5.0	5.1	3.8	4.4	5.3	4.0	4.7	5.9	4.9	5.5
26	5.8	3.8	4.8	5.0	3.8	4.4	5.5	4.0	4.8	5.8	4.7	5.3
27	5.6	3.5	4.6	5.2	3.8	4.5	5.4	3.9	4.7	6.1	4.7	5.5
28	5.4	3.3	4.6	5.2	3.9	---	5.3	3.9	4.7	6.2	5.0	5.7
29	5.6	3.4	4.6	---	---	---	5.2	4.0	4.7	6.5	5.2	5.8
30	5.4	3.2	4.4	---	---	---	5.2	4.0	4.7	6.4	5.5	6.0
31	---	---	---	---	---	---	5.3	4.1	4.8	---	---	---
MONTH	6.7	3.2	5.0	5.3	2.5	4.1	6.4	3.9	4.8	6.5	4.2	5.3

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE

LOCATION.--Lat 39°30'03", long 75°34'07", New Castle County, Hydrologic Unit 02040205, on water-quality recorder located on platform about 0.4 mi (0.6 km) downstream from Reedy Island near Port Penn.

DRAINAGE AREA.--11,200 mi² (29,100 km²) approximately.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1963 to current year.
pH: February 1970 to current year.
WATER TEMPERATURES: February 1970 to current year.
DISSOLVED OXYGEN: February 1970 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 35,600 micromhos Nov. 15, 1978; minimum, 100 micromhos on several days in 1969, 1970, 1974, and 1979.
pH: Maximum, 8.9 Mar. 4, 1980; minimum, 5.4 Dec. 31, 1972.
WATER TEMPERATURES: Maximum 30.5°C on several days during August 1980; minimum, freezing point on many days during winter months.
DISSOLVED OXYGEN: Maximum, 17.1 mg/L Dec. 16, 19, 1976; minimum, 0.3 mg/L Sept. 16, 17, 1971.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	10400	3400	5880	---	---	---	8560	2320	4220
2	---	---	---	9800	3400	5450	---	---	---	8360	2560	4290
3	9600	2760	5400	8360	2720	4600	---	---	---	7960	2400	4250
4	7920	2160	4220	8720	2720	4680	---	---	---	7000	2600	3870
5	8400	2040	4000	8320	2720	4320	10400	1800	3920	9240	3200	5100
6	6320	1560	2860	7120	2320	4070	8040	1600	3470	10000	3760	6620
7	4200	1200	2180	5560	2160	3280	8400	1960	3460	9640	3600	6700
8	2160	800	1510	7560	2200	3700	6560	600	2180	5600	2720	3680
9	1560	800	1110	5960	2200	3420	7520	800	2050	5960	2760	4040
10	2600	760	1140	5920	1920	3090	7000	800	2210	6400	2760	4290
11	3520	560	1440	5400	1800	3090	9640	1000	4050	7400	2960	5140
12	2200	400	971	7000	2600	4620	10000	800	2990	6160	1760	3480
13	2000	400	713	10600	2600	6160	5400	800	2440	4560	1400	2740
14	4720	400	1480	11200	3200	6570	7640	1160	4180	8000	2200	4790
15	8040	400	4040	11200	2840	7450	8440	2040	5160	8720	3000	5660
16	9560	840	4070	10400	2800	6030	9560	2600	5190	10200	3200	6230
17	10000	1600	5280	10400	2160	5540	6600	1920	3510	7400	3640	5130
18	10000	2440	5570	8800	2200	4510	8840	2000	4360	5520	4200	4700
19	9160	2800	5200	9920	2800	5480	10200	2440	5150	4840	4000	4470
20	9520	2960	5440	9960	3200	5460	11100	3960	6460	4840	4000	4320
21	8800	2800	4960	10200	3200	5690	10600	3760	6670	9360	3800	5100
22	7560	2760	4450	10000	3600	5600	9360	3960	6180	9120	3800	5270
23	8440	2720	4960	9120	3640	5370	9360	4000	5950	10200	3800	5970
24	8800	2800	4990	7760	3400	4930	9160	4000	5960	6600	3520	4430
25	7800	2360	4080	7920	3200	4750	8440	4560	6140	7200	2960	4100
26	7640	2000	3880	8800	3520	5650	7120	4000	5150	6400	2840	3980
27	11200	2040	5310	4840	2040	3420	7520	3000	4240	8440	2400	4270
28	10200	2800	6070	4400	800	2580	5920	2720	3500	10300	2840	5310
29	10000	2800	5410	---	---	---	5160	2000	3060	10600	2960	5100
30	10400	2840	5640	---	---	---	6800	2040	3310	8720	2560	4250
31	12000	3240	5970	---	---	---	8440	2200	3930	10800	2720	5620
MONTH	12000	400	3870	11200	800	4840	11100	600	4250	10800	1400	4750

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	10700	3600	6050	16000	10200	11800	---	---	---	4440	960	2170
2	---	---	---	14700	11400	---	---	---	---	6000	760	2400
3	---	---	---	---	---	---	---	---	---	6320	800	2520
4	---	---	---	18600	10400	---	---	---	---	5520	800	1840
5	---	---	---	20600	11600	17000	---	---	---	5000	800	2110
6	---	---	---	19200	9240	13500	---	---	---	6160	840	2560
7	---	---	---	20000	8840	14800	---	---	---	6000	1000	2740
8	---	---	---	19600	9520	13900	---	---	---	5640	1160	2870
9	---	---	---	17600	10000	12300	---	---	---	6360	1240	3010
10	---	---	---	18800	10400	13900	840	360	---	8160	1360	3600
11	---	---	---	20600	9960	14300	840	320	476	7160	1600	3360
12	---	---	---	14800	7760	10500	440	320	377	7240	1520	2890
13	---	---	---	17400	7800	11600	440	320	378	6040	1400	2990
14	---	---	---	18600	9600	13600	800	320	415	6960	1360	2910
15	---	---	---	12000	8040	9780	1120	200	443	5760	1240	2680
16	---	---	---	11600	7200	8730	440	320	408	6040	1360	2780
17	---	---	---	12000	6840	---	720	200	---	6800	1400	2740
18	---	---	---	---	---	---	440	200	344	5960	1640	2920
19	---	---	---	9200	5600	---	360	200	284	4840	1600	2570
20	---	---	---	12000	4800	6720	560	160	292	5400	1560	2530
21	---	---	---	11200	5600	7750	320	200	301	5120	1800	3140
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	5200	840	---	---	---	---
26	16000	11400	---	---	---	---	6200	960	2750	---	---	---
27	20400	11100	15200	---	---	---	5760	1360	3130	11600	3800	7200
28	17800	11200	13500	---	---	---	6840	1400	3780	11800	3800	6900
29	16600	10400	12700	---	---	---	6840	1400	3840	12700	4400	7160
30	---	---	---	---	---	---	5560	1400	2870	13000	4720	7730
31	---	---	---	---	---	---	---	---	---	12600	5120	7680
MONTH	20400	3600	11900	20600	4800	12000	6840	160	1340	13000	760	3620

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	12600	4960	7710	15100	7600	10100	15200	8160	10700	16800	10400	12700
2	12800	5120	7730	15400	7640	10500	14000	7960	10200	15800	9120	11900
3	12000	5360	7800	14000	7400	9650	13100	7800	9700	16000	9200	11400
4	12400	4800	7460	14000	7360	9800	16300	7760	10600	17000	9240	12100
5	12400	5000	8220	14400	7640	10500	16000	8720	11100	16800	10000	12600
6	13600	5600	8880	13500	7600	9790	15400	8400	10700	17000	10200	12500
7	13000	5760	8870	14700	7400	10000	16000	8000	10200	16200	10000	12400
8	14400	5800	8780	13000	8000	10100	15800	8000	10700	17000	10600	13100
9	13400	5120	8320	15200	7160	9610	16000	7600	10300	17200	10800	13200
10	13100	5520	8120	15200	7200	9970	16200	7760	10500	16800	9600	12400
11	12800	5600	7850	15500	7760	10400	16400	8160	11200	16000	9640	12400
12	12800	5520	7870	15900	8200	10600	16000	8320	10800	16200	9920	12300
13	13200	5600	7920	15100	8320	10700	15600	8200	11000	16200	10200	12800
14	13600	5800	8310	15600	8320	11000	16000	8760	11600	16400	10800	13200
15	13900	6160	9190	15800	8800	11200	15600	8400	11100	15100	11100	12700
16	13400	6160	8310	14300	7800	10200	15200	8040	10500	21000	11800	15700
17	12800	6000	8450	---	---	---	15800	8160	12000	19900	14400	17000
18	14300	6600	9520	---	---	---	17600	9560	13000	18800	12300	14800
19	13200	6800	9550	---	---	---	17200	9360	12700	18800	11900	14600
20	14000	7200	9820	---	---	---	17800	9200	12800	19900	11800	15000
21	13200	6160	9050	13600	6720	---	18600	10600	13900	19000	12000	14500
22	13600	6160	9430	14200	6840	9800	19600	11500	15200	19400	11200	14000
23	15200	6400	9780	15000	6600	9810	19400	11400	14700	19200	11400	14300
24	14400	6560	9590	15800	6800	9540	18400	11400	13900	20400	11800	15000
25	14000	6000	9000	17000	7160	10500	18700	11200	13800	21200	13100	16400
26	14700	6000	9000	16200	7600	10500	18800	11200	13900	19600	12400	15900
27	15200	6560	9950	16000	7800	10400	18800	11200	14100	17800	11900	14100
28	14400	6800	9560	15200	7800	10500	18600	11200	14000	19200	12000	14300
29	16400	7240	10400	16000	8000	10800	18200	11600	14200	20400	12000	15000
30	15000	7560	10200	15600	7920	10900	17800	11600	14300	20000	13600	16300
31	---	---	---	14800	7960	10500	17000	11800	14100	---	---	---
MONTH	16400	4800	8820	17000	6600	10300	19600	7600	12200	21200	9120	13800

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE--Continued

PH (UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	7.3	6.8	7.1	---	---	---	7.4	6.9	7.1
2	---	---	---	7.4	6.8	7.1	---	---	---	7.4	6.9	7.1
3	7.2	6.7	6.9	7.3	6.9	7.0	---	---	---	7.4	6.9	7.1
4	7.2	6.7	6.9	7.4	6.8	7.1	---	---	---	7.3	6.9	7.0
5	7.2	6.7	6.9	7.3	6.8	7.0	7.2	6.7	---	7.4	7.0	7.2
6	7.1	6.7	6.9	7.3	6.7	7.0	7.0	6.6	6.8	7.5	7.1	7.3
7	7.0	6.7	6.8	7.1	6.7	6.9	7.1	6.6	6.8	7.5	7.1	7.3
8	6.9	6.6	6.8	7.3	6.6	6.9	6.9	6.6	6.8	7.2	7.0	7.1
9	6.9	6.6	6.8	7.2	6.7	6.9	7.1	6.6	6.8	7.3	7.0	7.1
10	7.0	6.7	6.8	7.1	6.6	6.9	7.1	6.7	6.8	7.3	7.0	7.1
11	7.0	6.6	6.8	7.1	6.7	6.9	7.2	6.7	6.9	7.4	7.0	7.2
12	6.9	6.6	6.7	7.3	6.8	7.0	7.1	6.7	6.9	7.3	7.0	7.1
13	6.8	6.5	6.6	7.3	6.9	7.1	7.2	6.7	6.9	7.2	6.9	7.1
14	7.1	6.5	6.7	7.4	6.9	7.1	7.3	6.7	7.1	7.5	7.0	7.2
15	7.2	6.6	6.9	7.4	6.9	7.2	7.3	6.9	7.1	7.5	7.1	7.3
16	7.2	6.6	6.9	7.3	6.9	7.1	7.4	6.9	7.1	7.6	7.1	7.3
17	7.2	6.7	7.0	7.4	6.9	7.1	7.3	6.9	7.0	7.5	7.1	7.3
18	7.2	6.7	7.0	7.3	6.9	7.1	7.4	6.9	7.1	7.5	7.1	7.3
19	7.1	6.7	6.9	7.4	6.9	7.1	7.5	7.0	7.2	7.3	7.0	7.2
20	7.1	6.7	6.9	7.4	6.9	7.1	7.5	7.1	7.3	7.3	7.0	7.1
21	7.1	6.7	6.9	7.3	6.9	7.1	7.5	7.1	7.3	7.3	6.9	7.1
22	7.0	6.7	6.8	7.3	6.9	7.1	7.5	7.1	7.3	7.2	6.9	7.0
23	7.1	6.7	6.9	7.3	6.9	7.0	7.5	7.1	7.3	7.3	6.9	7.1
24	7.1	6.7	6.9	7.2	6.9	7.0	7.4	7.1	7.2	7.2	6.9	7.1
25	7.1	6.7	6.9	7.2	6.9	7.0	7.4	7.1	7.3	7.3	7.0	7.1
26	7.2	6.8	6.9	7.3	7.0	7.1	7.3	7.1	7.2	7.2	7.0	7.1
27	7.3	6.8	7.0	7.1	6.9	7.0	7.4	7.0	7.1	7.3	6.9	7.1
28	7.3	6.8	7.0	7.1	6.7	6.9	7.3	7.0	7.1	7.4	7.0	7.1
29	7.2	6.8	7.0	---	---	---	7.2	6.9	7.1	7.4	7.0	7.1
30	7.3	6.8	7.0	---	---	---	7.4	6.9	7.1	7.3	6.9	7.1
31	7.3	6.8	7.0	---	---	---	7.4	6.9	7.1	7.4	7.0	7.2
MONTH	7.3	6.5	6.9	7.4	6.6	7.0	7.5	6.6	7.1	7.6	6.9	7.2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	7.5	7.1	7.3	8.2	7.8	8.0	---	---	---	7.0	6.6	6.8
2	---	---	---	8.1	7.9	---	---	---	---	7.1	6.5	6.8
3	---	---	---	---	---	---	---	---	---	7.1	6.5	6.8
4	---	---	---	8.9	8.1	---	---	---	---	7.0	6.5	6.7
5	---	---	---	8.5	8.1	8.3	---	---	---	7.0	6.5	6.7
6	---	---	---	8.5	8.1	8.3	---	---	---	7.1	6.6	6.8
7	---	---	---	8.5	8.1	8.3	---	---	---	7.1	6.6	6.8
8	---	---	---	8.6	8.1	8.3	---	---	---	7.1	6.6	6.8
9	---	---	---	8.5	8.1	8.3	---	---	---	7.2	6.6	6.9
10	---	---	---	8.6	8.1	8.3	6.6	6.4	---	7.3	6.7	6.9
11	---	---	---	8.4	7.9	8.1	6.5	6.3	6.4	7.3	6.8	7.0
12	---	---	---	8.2	7.8	8.0	6.5	6.3	6.4	7.3	6.8	6.9
13	---	---	---	8.4	7.8	8.0	6.5	6.3	6.4	7.2	6.8	7.0
14	---	---	---	8.4	7.9	8.2	6.5	6.3	6.4	7.3	6.8	7.0
15	---	---	---	8.2	7.8	8.0	6.6	6.4	6.5	7.2	6.8	7.0
16	---	---	---	8.2	7.8	7.9	6.5	6.4	6.5	7.3	6.9	7.1
17	---	---	---	8.3	7.8	---	6.5	6.3	6.4	7.3	6.9	7.1
18	---	---	---	---	---	---	6.5	6.4	6.4	7.3	7.0	7.1
19	7.6	7.4	---	7.9	7.5	---	6.5	6.4	6.4	7.2	6.9	7.1
20	8.0	7.4	7.7	8.1	7.5	7.7	6.5	6.4	6.4	7.2	6.9	7.0
21	8.0	7.7	7.8	8.1	7.6	7.8	6.4	6.4	6.4	7.2	7.0	7.1
22	8.0	7.7	7.8	---	---	---	---	---	---	---	---	---
23	8.0	7.7	7.8	---	---	---	---	---	---	---	---	---
24	8.0	7.7	7.8	---	---	---	---	---	---	---	---	---
25	8.0	7.6	7.8	---	---	---	7.0	6.6	---	---	---	---
26	8.1	7.7	7.9	---	---	---	7.1	6.6	6.8	---	---	---
27	8.3	7.8	8.1	---	---	---	7.1	6.6	6.8	7.6	7.2	7.4
28	8.3	7.9	8.0	---	---	---	7.2	6.7	6.9	7.6	7.1	7.3
29	8.2	7.8	8.0	---	---	---	7.1	6.7	6.9	7.6	7.1	7.3
30	---	---	---	---	---	---	7.0	6.7	6.8	7.6	7.1	7.4
31	---	---	---	---	---	---	---	---	---	7.6	7.2	7.4
MONTH	8.3	7.1	7.8	8.9	7.5	8.1	7.2	6.3	6.6	7.6	6.5	7.0

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE--Continued

PH (UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.6	7.1	7.3	7.5	7.3	7.4	7.5	7.4	7.5	7.6	7.5	7.5
2	7.6	7.1	7.3	7.5	7.3	7.4	7.6	7.4	7.5	7.6	7.5	7.5
3	7.5	7.1	7.3	7.5	7.2	7.3	7.6	7.5	7.5	7.6	7.5	7.5
4	7.6	7.2	7.3	7.4	7.2	7.3	7.6	7.5	7.5	7.7	7.5	7.6
5	7.6	7.2	7.4	7.5	7.2	7.3	7.6	7.5	7.5	7.7	7.5	7.6
6	7.6	7.2	7.4	7.5	7.2	7.3	7.6	7.5	7.5	7.8	7.5	7.6
7	7.6	7.3	7.4	7.5	7.3	7.4	7.6	7.4	7.5	7.7	7.5	7.6
8	7.6	7.2	7.4	7.5	7.3	7.4	7.7	7.4	7.5	7.9	7.6	7.7
9	7.7	7.2	7.5	7.6	7.3	7.4	7.7	7.4	7.5	7.8	7.6	7.7
10	7.6	7.2	7.4	7.5	7.3	7.4	7.7	7.5	7.6	7.7	7.5	7.6
11	7.6	7.2	7.4	7.5	7.3	7.4	7.7	7.5	7.6	7.7	7.5	7.6
12	7.6	7.2	7.4	7.5	7.3	7.4	7.7	7.5	7.5	7.8	7.5	7.6
13	7.6	7.2	7.4	7.5	7.3	7.4	7.7	7.5	7.6	7.7	7.6	7.6
14	7.6	7.2	7.4	7.5	7.3	7.4	7.8	7.5	7.6	7.7	7.6	7.6
15	7.6	7.2	7.4	7.5	7.3	7.4	7.8	7.5	7.6	7.6	7.6	7.6
16	7.5	7.2	7.3	7.5	7.4	7.4	7.7	7.5	7.6	7.6	7.4	7.5
17	7.5	7.2	7.3	---	---	---	7.8	7.5	7.7	7.5	7.4	7.5
18	7.5	7.3	7.4	---	---	---	7.8	7.5	7.6	7.5	7.4	7.4
19	7.5	7.3	7.4	---	---	---	7.7	7.5	7.6	7.5	7.4	7.4
20	7.5	7.4	7.4	---	---	---	7.8	7.5	7.6	7.5	7.4	7.4
21	7.6	7.4	7.5	7.5	7.2	---	7.8	7.5	7.6	7.4	7.4	7.4
22	7.7	7.3	7.5	7.5	7.2	7.4	7.7	7.6	7.6	7.5	7.3	7.4
23	7.7	7.3	7.5	7.6	7.4	7.4	7.7	7.5	7.6	7.4	7.3	7.4
24	7.6	7.3	7.4	7.6	7.4	7.5	7.7	7.5	7.6	7.5	7.3	7.4
25	7.5	7.3	7.4	7.6	7.4	7.5	7.7	7.5	7.6	7.4	7.4	7.4
26	7.6	7.3	7.4	7.6	7.4	7.5	7.7	7.5	7.6	7.4	7.3	7.4
27	7.5	7.3	7.4	7.6	7.4	7.5	7.6	7.5	7.5	7.4	7.3	7.4
28	7.5	7.2	7.4	7.6	7.5	7.5	7.6	7.5	7.5	7.4	7.3	7.4
29	7.5	7.3	7.4	7.6	7.5	7.5	7.6	7.4	7.5	7.5	7.3	7.4
30	7.5	7.3	7.4	7.6	7.4	7.5	7.6	7.5	7.5	7.5	7.4	7.5
31	---	---	---	7.5	7.4	7.5	7.6	7.5	7.5	---	---	---
MONTH	7.7	7.1	7.4	7.6	7.2	7.4	7.8	7.4	7.6	7.9	7.3	7.5

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	14.0	13.0	13.5	---	---	---	5.5	4.5	5.0
2	---	---	---	14.5	13.5	14.0	---	---	---	5.0	4.5	4.5
3	21.5	21.0	21.0	14.5	13.5	14.0	---	---	---	5.0	4.5	4.5
4	21.5	20.5	21.0	14.0	13.0	13.5	---	---	---	4.5	3.5	4.0
5	21.0	20.5	21.0	13.5	13.0	13.0	9.0	8.5	---	3.5	3.0	3.5
6	20.5	19.5	20.0	13.5	13.0	13.0	8.5	8.0	8.5	3.5	3.0	3.5
7	20.0	18.5	19.5	13.5	12.5	13.0	8.5	8.0	8.5	3.5	2.5	3.0
8	19.0	18.0	18.5	13.0	12.5	12.5	8.5	6.5	7.5	3.5	3.0	3.0
9	18.0	16.5	17.5	13.0	12.5	13.0	8.0	6.5	7.0	3.0	2.5	3.0
10	17.0	15.5	16.0	13.5	13.0	13.0	7.5	6.5	7.0	3.5	2.5	3.0
11	16.5	15.5	16.0	13.0	12.5	12.5	8.0	6.5	7.5	4.0	2.5	3.5
12	16.0	15.5	15.5	13.0	12.5	12.5	8.0	7.0	7.5	4.0	2.0	3.0
13	15.5	15.0	15.5	12.5	12.0	12.0	8.0	7.0	7.5	3.5	2.0	3.0
14	15.0	14.0	14.5	12.5	11.0	12.0	7.5	7.0	7.5	3.5	2.5	3.5
15	15.5	14.0	14.5	12.0	11.0	11.5	7.5	6.5	7.0	4.5	3.5	4.0
16	15.0	13.5	14.5	12.0	11.0	11.5	7.5	6.5	7.0	4.5	3.5	4.0
17	15.0	14.0	14.5	11.5	10.5	11.0	7.0	5.0	6.0	4.0	3.5	4.0
18	16.0	14.5	15.0	12.0	10.5	11.0	6.0	5.0	5.5	4.5	4.0	4.0
19	16.0	14.5	15.0	12.0	11.0	11.0	5.5	4.5	5.0	4.5	4.0	4.0
20	16.0	15.0	15.5	11.5	11.0	11.0	4.5	4.0	4.5	4.5	4.0	4.0
21	17.0	15.5	16.0	12.0	11.0	11.5	4.5	3.5	4.0	4.5	3.5	4.0
22	17.0	15.5	16.0	12.0	11.0	11.5	4.5	4.0	4.0	4.5	4.0	4.0
23	17.0	16.0	16.5	12.0	11.0	11.5	4.5	4.0	4.5	4.5	3.5	4.0
24	16.5	15.5	16.0	12.0	11.5	12.0	5.5	4.5	4.5	3.5	3.0	3.0
25	15.5	14.5	15.0	12.5	12.0	12.0	5.5	5.0	5.0	3.5	3.0	3.0
26	15.0	14.0	14.5	13.0	12.0	12.5	6.0	5.0	5.5	4.0	2.5	3.0
27	14.5	13.5	14.0	13.0	12.0	12.5	5.5	4.5	5.0	3.5	2.5	3.0
28	14.0	13.0	13.5	13.0	12.0	12.5	5.5	4.5	5.0	3.5	3.0	3.0
29	14.0	13.0	13.5	---	---	---	5.5	4.5	5.0	3.5	2.5	3.0
30	14.0	13.0	13.5	---	---	---	6.0	4.5	5.0	2.5	2.0	2.0
31	14.0	12.5	13.0	---	---	---	5.5	4.5	5.0	2.5	1.0	2.0
MONTH	21.5	12.5	16.0	14.5	10.5	12.5	9.0	3.5	6.0	5.5	1.0	3.5

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	1.5	.5	1.0	1.5	.0	1.0	---	---	---	15.0	14.0	14.5
2	---	---	---	1.0	.0	---	---	---	---	15.5	14.5	15.0
3	---	---	---	---	---	---	---	---	---	16.0	14.5	15.5
4	---	---	---	2.0	1.0	---	---	---	---	16.5	15.0	16.0
5	---	---	---	2.0	1.0	1.5	---	---	---	17.0	15.5	16.5
6	---	---	---	2.5	1.5	2.0	---	---	---	18.0	16.0	17.0
7	---	---	---	3.0	1.5	2.0	---	---	---	18.5	16.5	17.5
8	---	---	---	3.5	2.5	3.0	---	---	---	17.5	16.5	17.0
9	---	---	---	4.5	3.0	3.5	---	---	---	17.5	16.5	17.0
10	---	---	---	4.5	3.0	3.5	13.0	11.5	---	18.0	16.5	17.0
11	---	---	---	5.0	3.5	4.0	13.5	11.5	12.5	17.5	16.5	17.0
12	---	---	---	5.0	3.5	4.0	13.5	12.0	12.5	18.5	17.0	17.5
13	---	---	---	4.0	3.0	3.5	14.0	12.5	13.0	19.0	17.5	18.0
14	---	---	---	4.0	3.5	3.5	13.5	12.5	13.0	19.0	18.0	18.5
15	---	---	---	6.5	3.0	4.0	13.5	13.0	13.5	19.5	18.0	18.5
16	---	---	---	5.0	3.5	4.0	13.0	12.0	12.5	19.5	17.5	18.5
17	---	---	---	5.0	4.0	---	13.0	11.5	---	20.0	18.5	19.0
18	---	---	---	---	---	---	13.5	12.0	12.5	19.0	18.0	18.5
19	---	---	---	6.5	5.5	---	14.0	12.5	13.0	20.0	18.5	19.0
20	2.0	1.5	---	6.5	5.5	6.0	14.5	13.0	14.0	19.5	19.0	19.0
21	3.0	1.5	2.0	7.0	6.0	6.5	14.5	13.5	14.0	19.0	18.5	19.0
22	2.5	1.5	2.0	---	---	---	---	---	---	---	---	---
23	3.5	2.0	2.5	---	---	---	---	---	---	---	---	---
24	4.0	2.5	3.0	---	---	---	---	---	---	---	---	---
25	3.5	2.5	3.0	---	---	---	17.0	15.0	---	---	---	---
26	3.5	2.5	3.0	---	---	---	16.0	15.0	15.5	---	---	---
27	3.0	2.0	2.5	---	---	---	15.5	14.5	15.0	21.0	20.0	20.5
28	3.0	2.0	2.5	---	---	---	15.0	14.5	15.0	21.5	19.5	20.5
29	2.5	1.5	2.0	---	---	---	15.0	14.5	14.5	21.5	20.0	21.0
30	---	---	---	---	---	---	14.5	14.0	14.5	21.5	20.0	21.0
31	---	---	---	---	---	---	---	---	---	22.0	20.5	21.0
MONTH	4.0	.5	2.5	7.0	.0	3.5	17.0	11.5	13.5	22.0	14.0	18.0

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	22.5	21.0	22.0	26.0	24.5	25.0	29.5	28.0	28.5	28.5	27.0	27.5
2	23.0	21.5	22.5	26.0	24.5	25.5	29.5	28.0	28.5	29.0	27.5	28.0
3	23.5	22.0	22.5	25.5	25.0	25.5	29.5	28.0	28.5	29.0	27.5	28.0
4	23.5	22.0	22.5	27.0	25.0	26.0	30.0	28.5	29.0	29.0	27.0	28.0
5	23.0	22.0	22.5	27.0	25.5	26.0	30.0	28.5	29.0	28.0	27.0	27.5
6	22.5	22.0	22.5	27.0	25.5	26.5	30.5	29.0	29.5	28.5	27.0	27.5
7	24.0	22.0	22.5	27.0	25.5	26.0	30.5	29.0	29.5	28.0	27.0	27.5
8	23.5	22.0	23.0	26.0	25.0	25.5	30.5	29.0	29.5	28.0	26.0	27.0
9	22.5	21.5	22.0	27.0	25.0	26.0	30.0	29.0	29.5	27.0	26.5	26.5
10	22.0	21.0	21.5	27.5	25.5	26.0	30.0	29.0	29.5	27.0	26.0	26.5
11	22.5	20.5	21.5	27.5	26.0	26.5	30.0	29.0	29.5	26.5	25.0	26.0
12	22.5	21.0	21.5	27.0	26.0	26.5	29.5	28.5	29.5	26.5	25.0	25.5
13	22.5	21.0	22.0	27.5	25.5	26.5	29.5	28.5	29.0	26.0	25.0	25.5
14	23.5	21.5	22.0	28.0	26.0	27.0	29.0	28.5	29.0	26.5	25.0	25.5
15	23.0	21.5	22.5	27.5	26.0	27.0	29.0	28.0	28.5	26.0	24.5	25.5
16	22.5	22.0	22.5	28.0	26.5	27.0	28.5	27.0	28.0	25.5	24.0	24.5
17	23.0	21.5	22.5	---	---	---	28.0	26.5	27.0	25.0	24.0	24.5
18	23.0	21.5	22.0	---	---	---	27.0	26.0	26.5	25.0	24.0	24.5
19	23.5	22.0	22.5	---	---	---	26.5	26.0	26.0	25.5	24.0	24.5
20	23.0	22.0	22.0	---	---	---	27.0	26.0	26.5	24.5	24.0	24.5
21	23.0	22.0	22.5	29.0	28.5	---	26.5	25.5	26.0	25.5	24.0	24.5
22	24.0	22.0	22.5	30.0	28.0	29.0	26.0	25.0	25.5	26.0	24.5	25.0
23	25.0	22.5	23.0	29.0	28.0	28.5	26.5	25.0	25.5	25.5	24.5	25.0
24	24.5	23.0	23.5	29.0	28.0	28.5	27.5	25.0	26.0	25.0	24.0	24.5
25	25.0	23.5	24.0	29.5	27.5	28.5	27.0	25.5	26.0	24.0	23.5	24.0
26	24.5	23.5	24.0	29.5	27.5	28.5	27.5	25.5	26.5	24.0	23.0	23.5
27	25.5	23.5	24.5	29.0	28.0	28.5	27.5	26.0	26.5	23.0	22.0	22.5
28	25.5	24.0	25.0	28.5	27.5	28.0	28.0	26.5	27.0	22.5	21.5	22.0
29	25.5	23.5	25.0	28.5	27.5	28.0	27.5	26.5	27.0	22.0	21.0	22.0
30	25.5	24.5	25.0	29.0	28.0	28.5	27.5	26.5	27.0	22.0	21.0	21.5
31	---	---	---	29.0	28.0	28.5	28.0	27.0	27.5	---	---	---
MONTH	25.5	20.5	23.0	30.0	24.5	27.0	30.5	25.0	28.0	29.0	21.0	25.5

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	---	---	---	8.8	7.8	8.4	---	---	---	11.6	10.8	11.2
2	---	---	---	8.8	8.0	8.5	---	---	---	11.5	10.8	11.1
3	6.8	5.9	6.4	8.8	8.2	8.5	---	---	---	11.6	10.8	11.2
4	6.5	5.6	6.1	9.0	8.1	8.6	---	---	---	11.6	11.0	11.3
5	6.7	5.6	6.3	9.0	8.0	8.5	9.8	9.4	---	11.9	11.4	11.7
6	6.7	5.8	6.4	8.8	7.7	8.3	9.7	9.3	9.5	12.1	11.5	11.8
7	6.9	6.0	6.6	8.6	7.7	8.1	9.7	9.3	9.5	12.0	11.6	11.9
8	7.4	6.4	6.9	8.7	7.6	8.3	11.0	9.5	10.1	11.9	11.6	11.7
9	7.8	6.5	7.2	8.8	7.7	8.2	10.7	9.8	10.3	11.9	11.6	11.7
10	7.8	7.0	7.6	8.6	7.6	8.1	10.8	10.0	10.3	12.0	11.5	11.8
11	7.7	7.0	7.4	8.8	7.8	8.3	10.6	10.2	10.3	12.1	11.6	11.9
12	7.6	6.8	7.3	9.2	8.3	8.7	10.9	10.2	10.5	12.4	11.6	11.9
13	7.4	6.8	7.2	9.2	8.4	8.9	11.0	10.6	10.8	12.4	11.5	11.9
14	7.6	6.6	7.3	9.2	8.4	8.8	11.2	10.7	10.9	12.2	11.7	12.0
15	7.9	7.2	7.6	9.2	8.6	9.0	11.2	10.8	11.0	12.2	11.8	12.0
16	8.0	7.4	7.7	9.3	8.8	9.0	11.2	10.5	10.9	12.2	11.6	12.0
17	7.8	7.3	7.6	9.4	8.9	9.1	13.6	10.7	11.3	12.2	11.6	11.9
18	7.6	7.0	7.3	9.4	8.8	9.1	11.6	11.0	11.4	12.1	11.5	11.8
19	7.5	6.8	7.2	9.3	8.8	9.1	11.7	11.2	11.5	11.9	11.4	11.7
20	7.5	6.8	7.2	9.3	8.7	9.0	12.0	11.6	11.8	11.9	11.4	11.6
21	7.4	6.6	7.0	9.2	8.5	8.9	12.1	11.8	12.0	11.9	11.3	11.6
22	7.2	6.4	6.8	9.2	8.4	8.8	12.1	11.6	11.9	11.7	11.3	11.5
23	7.4	6.6	6.9	9.0	8.4	8.7	12.0	11.4	11.8	11.7	11.3	11.5
24	7.6	6.8	7.3	8.9	8.4	8.7	11.9	11.3	11.7	11.7	11.2	11.5
25	7.8	7.2	7.6	9.0	8.4	8.7	11.9	11.4	11.7	11.8	11.4	11.5
26	8.0	7.5	7.8	9.2	8.6	9.0	11.8	11.4	11.6	11.6	11.4	11.5
27	8.4	7.8	8.1	9.0	8.6	8.8	11.8	11.4	11.5	11.8	11.4	11.6
28	8.5	7.8	8.2	9.4	8.5	8.8	11.9	11.3	11.6	11.8	11.4	11.6
29	8.4	7.8	8.1	---	---	---	12.2	11.4	11.7	11.9	11.4	11.7
30	8.6	7.8	8.1	---	---	---	11.8	11.2	11.4	12.1	11.6	11.9
31	8.6	7.8	8.2	---	---	---	11.6	11.0	11.3	12.3	11.8	12.1
MONTH	8.6	5.6	7.3	9.4	7.6	8.7	13.6	9.3	11.1	12.4	10.8	11.7

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	12.7	12.1	12.4	---	---	---	---	---	---	7.2	6.7	6.9
2	---	---	---	---	---	---	---	---	---	7.2	6.8	7.0
3	---	---	---	---	---	---	---	---	---	7.1	6.7	6.9
4	---	---	---	---	---	---	---	---	---	7.2	6.6	6.9
5	---	---	---	---	---	---	---	---	---	7.0	6.5	6.8
6	---	---	---	---	---	---	---	---	---	8.0	6.9	7.4
7	---	---	---	---	---	---	---	---	---	7.6	7.0	7.3
8	---	---	---	---	---	---	---	---	---	7.3	6.6	6.9
9	---	---	---	---	---	---	---	---	---	7.5	6.4	7.0
10	---	---	---	13.3	12.4	---	9.8	9.4	---	7.8	6.8	7.3
11	---	---	---	13.2	11.8	12.4	9.4	9.0	9.2	7.9	7.3	7.5
12	---	---	---	12.2	11.6	11.9	9.2	8.8	8.9	8.8	7.3	7.8
13	---	---	---	12.3	11.6	11.9	8.9	8.6	8.8	8.4	7.9	8.1
14	---	---	---	12.3	11.6	12.0	8.8	8.5	8.7	8.3	7.8	8.0
15	---	---	---	12.6	10.6	11.7	8.9	8.5	8.7	8.6	7.8	8.1
16	---	---	---	12.7	11.4	11.7	9.2	8.6	8.9	8.5	7.8	8.1
17	---	---	---	12.0	11.4	---	9.1	8.0	---	8.4	7.7	8.1
18	---	---	---	---	---	---	8.9	8.5	8.7	8.4	7.9	8.2
19	---	---	---	12.0	11.3	---	8.6	8.1	8.4	8.4	7.8	8.1
20	---	---	---	12.1	11.1	11.5	8.2	7.5	7.9	8.2	7.6	7.8
21	---	---	---	11.9	10.9	11.3	7.8	7.6	7.7	7.9	7.6	7.7
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	7.8	7.4	---	---	---	---
26	---	---	---	---	---	---	7.7	7.2	7.4	---	---	---
27	---	---	---	---	---	---	7.9	7.1	7.4	7.8	7.2	7.6
28	---	---	---	---	---	---	8.1	7.5	7.8	8.0	7.2	7.5
29	---	---	---	---	---	---	8.0	6.8	7.4	8.0	7.3	7.6
30	---	---	---	---	---	---	6.9	6.5	6.7	8.2	7.2	7.6
31	---	---	---	---	---	---	---	---	---	7.9	7.1	7.5
MONTH	12.7	12.1	12.4	13.3	10.6	11.8	9.8	6.5	8.2	8.8	6.4	7.5

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.7	6.9	7.3	7.1	6.2	6.5	6.0	5.4	5.7	6.1	5.4	5.7
2	7.6	6.8	7.2	6.8	6.2	6.4	6.2	5.4	5.7	6.2	5.4	5.7
3	7.4	6.7	7.0	6.4	5.8	6.2	6.0	5.5	5.8	6.0	5.3	5.7
4	7.2	6.5	6.8	6.3	5.7	6.0	6.3	5.5	5.9	6.6	5.3	5.8
5	6.8	6.2	6.5	6.2	5.6	5.9	6.4	5.6	5.9	6.3	5.5	5.9
6	6.5	5.9	6.2	6.4	5.6	6.0	6.4	5.5	5.9	6.8	5.5	6.0
7	6.3	5.7	6.1	6.4	5.8	6.0	6.4	5.5	5.9	6.5	5.7	6.1
8	6.1	5.0	5.7	6.4	5.7	6.0	6.2	5.4	5.9	7.2	5.8	6.2
9	6.6	5.2	6.1	6.4	5.6	6.0	6.2	5.4	5.8	6.9	5.8	6.2
10	7.6	6.6	7.1	6.4	5.8	6.1	6.8	5.4	5.9	6.6	5.7	6.1
11	8.0	6.9	7.4	6.3	5.6	5.9	6.6	5.4	5.9	6.6	5.8	6.1
12	7.9	7.1	7.4	6.4	5.7	6.0	6.3	5.4	5.8	6.8	5.8	6.1
13	7.8	7.0	7.4	6.6	5.8	6.1	6.6	5.5	5.9	6.6	5.9	6.2
14	8.0	7.0	7.3	6.8	5.8	6.1	7.2	5.7	6.2	6.5	5.9	6.1
15	7.4	6.8	7.2	6.6	5.9	6.2	6.7	5.6	6.0	6.3	5.8	6.0
16	7.2	7.0	---	6.6	6.0	6.2	6.6	5.5	6.0	6.7	5.9	6.2
17	---	---	---	---	---	---	6.9	5.8	6.2	6.9	6.1	6.5
18	---	---	---	---	---	---	6.4	5.8	6.0	6.9	6.2	6.5
19	---	---	---	---	---	---	6.2	5.7	5.9	7.0	6.2	6.5
20	---	---	---	---	---	---	6.4	5.6	6.0	6.9	6.2	6.5
21	---	---	---	6.5	5.4	---	6.6	5.7	6.1	6.6	6.3	6.5
22	---	---	---	6.3	5.1	5.7	6.7	5.8	6.2	6.6	6.1	6.4
23	7.9	7.0	---	6.1	5.6	5.8	6.6	5.8	6.2	6.6	6.2	6.3
24	7.4	6.9	7.2	6.6	5.6	6.0	6.8	5.9	6.2	6.9	6.2	6.5
25	7.2	6.7	6.9	6.6	5.6	6.0	6.7	5.9	6.1	6.7	6.2	6.5
26	7.0	6.5	6.7	6.6	5.1	5.9	6.9	5.8	6.1	7.0	6.3	6.5
27	6.8	6.2	6.5	6.4	4.4	5.9	6.2	4.7	5.5	7.1	6.4	6.8
28	7.0	6.2	6.5	6.6	6.0	6.2	5.9	4.6	5.0	7.2	6.6	6.8
29	6.6	6.1	6.4	6.4	5.6	6.1	6.4	5.6	5.9	7.0	6.2	6.7
30	6.7	6.2	6.4	6.2	5.7	5.9	6.2	5.6	5.8	6.9	6.4	6.7
31	---	---	---	6.0	5.5	5.7	6.0	5.6	5.7	---	---	---
MONTH	8.0	5.0	6.8	7.1	4.4	6.0	7.2	4.6	5.9	7.2	5.3	6.3

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are colleced is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of annual maximum stage and discharge at crest-stage stations, and the second is a table of discharge measurements at low-flow partial-record stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial record stations

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Annual Maximum		
					Date	Gage height (feet)	Discharge (ft³/s)
		CALKINS CREEK BASIN					
01427650	N.B. Calkins Creek near Damascus, Pa.	Lat 41°42'00", long 75°10'00", at concrete bridge on State Highway 371 at West Damascus, 4.8 miles above Sunny Brook and 8.0 miles above mouth.	7.02	1962-64 1965-73≠ 1974-80	3-21-80	8.50	1,030
		LACKAWAXEN RIVER BASIN					
*01427950	W.B. Lackawaxen River near Aldenville, Pa.	Lat 41°40'28", long 75°22'35", Wayne County, at bridge on State Highway 247, 0.3 mile downstream from Johnsons Creek and 2.0 miles northwest of Aldenville. Datum of gage is 1,244.60 ft National Geodetic Vertical Datum of 1929.	40.6	1975-80	3-21-80	6.02	1,970
*01429300	Dyberry Creek above Reservoir near Honesdale, Pa.	Lat 41°39'26", long 75°17'12", Wayne County, on right bank 955 ft downstream from bridge on West Branch Dyberry Creek at Tanners Falls, 0.2 mile downstream from confluence of the east and west branches of Dyberry Creek, and 6 miles north of Dyberry. Datum of gage is 1,023.43 ft National Geodetic Vertical Datum of 1929.	45.8	1975-80	3-21-80	10.69	2,420
01430000	Lackawaxen River near Honesdale, Pa.	Lat 41°35'43", long 75°14'54", Wayne County, at Lemnitzer Bridge in Honesdale, on U.S. Highway 6, and 1.2 miles downstream from Dyberry Creek.	164	1949-69≠ 1974-80	3-21-80	5.68	3,850
01431000	Middle Creek near Hawley, Pa.	Lat 41°29'05", long 75°13'20", Wayne County, at bridge on L.R. 63022, 0.1 mile below Red Shale Brook, 2 miles northwest of Hawley, and 2.5 miles above mouth.	78.4	1945-60≠ 1961-80	3-21-80	5.20	1,860
01431680	Mill Brook near Paupack, Pa.	Lat 41°23'15", long 75°14'20", Pike County, at culvert on State Highway 507, 400 ft above mouth, 1.8 miles south of Paupack. Datum of gage is 1,183.84 ft National Geodetic Vertical Datum of 1929.	4.84	1960-80	3-21-80	5.50	262
		VANDERMARK CREEK BASIN					
01438300	Vandermark Creek at Milford, Pa.	Lat 41°19'35", long 74°47'50", Pike County, at stone bridge on Broad Street in Milford, and 0.4 mile above mouth. Datum of gage is 490.50 ft National Geodetic Vertical Datum of 1929.	5.36	1962-80	3-21-80	2.80	123

* Also low-flow partial-record station.
≠ Operated as a continuous-record station.

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual Maximum Date	Annual Maximum Gage height (feet)	Annual Maximum Discharge (ft^3/s)
		BRODHEAD CREEK BASIN					
01440300	Mill Creek at Mountainhome, Pa.	Lat 41°09'50", long 75°16'00", Monroe County, at stone-arch bridge on macadam road 0.5 mile east of Mountainhome, and 1.5 miles above mouth.	5.84	1961-80	3-21-80	9.39	718
*01440900	McMichael Creek near Stroudsburg, Pa.	Lat 40°58'04", long 75°13'08", Monroe County, at bridge on Dreher Ave., 2 miles southwest of Stroudsburg, 3.2 miles upstream from mouth.	63.9	1975-80	3-21-80	6.36	2,190
		MARTINS CREEK BASIN					
*01446600	Martins Creek near East Bangor, Pa.	Lat 40°54'00", long 75°12'08", Northampton County, at stone-arch culvert on Township Road 722, 1.8 miles northwest of East Bangor	10.4	1961-78† 1979-80	3-21-80	3.03	270
		LEHIGH RIVER BASIN					
*01450455	Buckwha Creek at Little Gap, Pa.	Lat 40°49'21", long 75°32'04", Carbon County, at bridge on L.R. 13035, 0.35 mile upstream from mouth and 0.75 mile south of Little Gap.	42.5	1975-80	3-21-80	6.57	1,360
*01452300	East Branch Monocacy Creek near Bath, Pa.	Lat 40°43'10", long 75°22'10", Northampton County, on left bank 25 ft downstream from bridge on L.R. 40863, 1.5 miles southeast of Bath, and 2.5 miles upstream from mouth. Datum of gage is 372.06 ft National Geodetic Vertical Datum of 1929.	5.35	1962-68† 1969-80	3-21-80	4.54	176
01454600	Polk Valley Run near Hellertown, Pa.	Lat 40°34'05", long 75°19'45", Northampton County, at concrete bridge on L.R. 48093, 0.7 mile above mouth, and 1.5 miles southeast of Hellertown.	2.14	1963-80	3-21-80	‡	100
		TINICUM CREEK BASIN					
*01458900	Tinicum Creek near Ottsville, Pa.	Lat 40°28'14", long 75°08'13", Bucks County, at concrete bridge on gravel road, 0.9 mile below confluence of Rapp Creek, 1.5 miles east of Ottsville, and 5.3 miles above mouth.	14.7	1962-80	3-21-80	4.69	1,090
		POQUESSING CREEK BASIN					
01465780	Poquessing Creek above Byberry Creek at Philadelphia, Pa.	Lat 40°14'10", long 74°58'33", Philadelphia County, on left bank 2,200 ft upstream from Byberry Creek, Philadelphia.	13.2	1965-70† 1971-80	9-18-80	5.79	851
		PENNYPACK CREEK BASIN					
01467045	Pennypack Creek below Verree Road, Philadelphia, Pa.	Lat 40°05'04", long 75°03'34", Philadelphia County, on left bank 600 ft downstream from Verree Road and 1 mile downstream from Rockledge Branch, Philadelphia.	42.8	1964-70† 1971-80	7-29-80	9.02	1,800

* Also low-flow partial-record station.
† Operated as a continuous-record station.
‡ Not determined.

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Annual Maximum		
					Date	Gage height (feet)	Discharge (ft³/s)
		SCHUYLKILL RIVER BASIN					
*01467500	Schuylkill River at Pottsville, Pa.	Lat 40°40'53", long 76°11'25", Schuylkill County, at bridge on State Highway 61 at Pottsville, and 1.7 miles downstream from Mill Creek.	53.4	1975-80	3-21-80	5.94	1,100
*01467948	West Branch Schuylkill River near Cressona, Pa.	Lat 40°38'30", long 76°11'43", Schuylkill County, at bridge on Gordon-Nagle Trail, 0.75 miles upstream from Panther Creek, and 1.0 mile north of Cressona.	52.5	1975-80	3-21-80	5.06	1,110
*01470190	Little Schuylkill River at Port Clinton, Pa.	Lat 40°35'24", long 76°01'43", Schuylkill County, 0.65 mile upstream from Rattling Run and 0.7 mile north of Port Clinton.	132	1975-80	3-21-80	7.06	4,290
*01470748	Sacony Creek near Virginville, Pa.	Lat 40°31'27", long 75°51'29", Berks County, at bridge on L.R. 06135, 1.0 mile upstream from mouth, and 1.0 mile east of Virginville.	54.1	1975-80	10- 1-80	6.68	1,150
*01470766	Schuylkill River at Temple, Pa.	Lat 40°24'52", long 75°56'23", Berks County, at concrete bridge on State Highway Route 383, 0.7 mile downstream from mouth of Maiden Creek, 0.6 mile west of Temple.	641	1978-80	3-21-80	12.09	13,500
*01470810	Northkill Creek at Bernville, Pa.	Lat 40°26'22", long 76°07'12", Berks County, at bridge on State Highway 183, 0.3 mile upstream from Little Northkill Creek and 0.7 mile northwest of Bernville.	18.8	1975-80	10- 1-80	5.51	744
*01470818	Little Northkill Creek near Bernville, Pa.	Lat 40°26'33", long 76°07'23", Berks County, at bridge on L.R. 06013, 1.5 miles west of Bernville and 1.6 miles upstream from mouth.	21.2	1975-80	10- 1-80	6.25	1,120
*01471800	Pine Creek near Manatawny, Pa.	Lat 40°24'43", long 75°44'02", Berks County at steel bridge on macadam road 0.5 mile above mouth, 0.5 mile below West Branch Pine Creek, and 2 miles north of Manatawny.	15.6	1961-80	3-21-80	4.58	196
*01472162	Schuylkill River at Phoenixville, Pa.	Lat 40°08'11", long 75°30'41", Chester County, on the downstream end of the left bank wingwall of Reading Railroad bridge across the mouth of French Creek at Phoenixville.	1,280	1971-80	3-22-80	82.30	14,700
01473100	Zacharias Creek near Skippack, Pa.	Lat 40°12'26", long 75°21'57", Montgomery County, at concrete weir 1.2 miles above mouth, and 2.2 miles southeast of Skippack.	7.27	1960-80	3-21-80	7.32	1,030
*01473193	Schuylkill River at Port Kennedy, Pa.	Lat 40°06'29", long 75°25'16", Montgomery County, on left bank 200 ft upstream from Betzwood Bridge, and 4.0 miles downstream from Perkiomen Creek at Port Kennedy.	1,691	1977-80	3-22-80	≠	20,000

* Also low-flow partial-record station.
≠ Not determined.

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Annual Maximum		
					Date	Gage height (feet)	Discharge (ft³/s)
*01473470	Stony Creek at Norristown, Pa.	Lat 40°07'38", long 75°20'43", Montgomery County, on right bank at culvert on Steiger Street in Norristown, 0.1 mile downstream from dam, 0.7 mile downstream from unnamed tributary, and 1.1 miles upstream from mouth.	20.4	1975-80	3-21-80	5.40	‡
		DARBY CREEK BASIN					
*01475555	Hermesprota Creek at Darby, Pa.	Lat 39°54'02", long 75°16'19", Delaware County, on right bank at culvert on Linden Avenue in Darby, 1.7 miles upstream from mouth.	1.01	1975-80	3-21-80	3.41	‡
*01475560	Stony Creek at Propsect Park, Pa.	Lat 39°53'14", long 75°19'00", Delaware County, on left bank at culvert and dam on 13th Street in Propsect Park.	2.29	1975-80	10- 1-79	11.50	‡
*01475600	Muckinipattis Creek at Glenolden, Pa.	Lat 39°53'44", long 75°17'20", Delaware County, on left bank at Glenolden Avenue in Glenolden, 1.5 miles upstream from mouth.	3.50	1975-80	10- 1-79	5.21	‡
		CRUM CREEK BASIN					
*01475850	Crum Creek near Newtown Square, Pa.	Lat 39°58'35", long 75°26'13", Delaware County, at Castle Rock Bridge on State Highway 3, 0.6 mile upstream from Preston Run, 0.8 mile upstream from Geist Reservoir, and 2 miles west of Newtown Square.	15.8	1977-80	10- 1-79	5.30	1,300
*01476000	Crum Creek at Woodlyn, Pa.	Lat 39°52'44", long 75°20'58", Delaware County, on right bank at bridge on Bullens Lane in Woodlyn.	33.3	1931-37† 1975-80	11-26-79	6.35	1,240
		RIDLEY CREEK BASIN					
*01476435	Ridley Creek at Dutton Mill near West Chester, Pa.	Lat 39°58'52", long 75°31'02", Chester County, on left bank at Strasburg Road, 0.1 mile west of Dutton Mill and 4.9 miles east of West Chester.	9.70	1975-80	10- 1-80	5.62	767
*01476500	Ridley Creek at Moylan, Pa.	Lat 39°54'08", long 75°23'32", Delaware County, on upstream left bank of Manchester Road bridge intersection with Knowltown Road, at Moylan, and 1.0 mile south of Media.	31.9	1978-80	11-26-79	7.42	‡
		CHESTER CREEK BASIN					
*01476836	East Branch Chester Creek near West Chester, Pa.	Lat 39°56'09", long 75°32'29", Chester County, at bridge on Street Road, 0.4 mile upstream from Goose Run, 1.1 miles northwest of Cheyney, and 3.8 miles east of the intersection of Pa. Route 100, and U.S. Highway 202 in West Chester.	10.8	1975-80	11-26-79	6.98	817

* Also low-flow partial-record station.
† Operated as a continuous-record station.
‡ Not determined.

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual Maximum Date	Gage height (feet)	Discharge (ft^3/s)
*01476853	East Branch Chester Creek at Cheyney, Pa.	Lat 39°55'58", long 75°31'03", Delaware County, at bridge on Station Road, 0.5 mile northeast of Cheyney and 1.5 miles downstream from Goose Run.	22.8	1975-80	11-26-79	9.31	987
*01476950	West Branch Chester Creek near Chester Heights, Pa.	Lat 39°52'36", long 75°27'05", Delaware County, at bridge on Birney Road at Aston Mills, 1.2 miles upstream from confluence with East Branch, and 1.8 miles southeast of Chester Heights.	18.0	1975-80	11-26-79	5.93	935
		CHRISTINA CREEK BASIN					
01478200	Middle Branch White Clay Creek near Landenberg, Pa.	Lat 39°46'54", long 75°48'03", Chester County, at bridge on L.R. 15017, 1.4 miles above mouth, and 1.7 miles west of Landenberg.	12.7	1960-80	3-21-80	6.07	400
01480610	Sucker Run near Coatesville, Pa.	Lat 39°58'20", long 75°51'03", Chester County, at concrete bridge on South Park Avenue at State Highway 372, 1.6 miles above mouth, and 2 miles west of Coatesville.	2.57	1964-80	3-21-80	4.95	310

* Also low-flow partial-record station.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record staitons are given in the following table. These measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of the stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1980

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Measurements Date	Measurements Discharge (cfs)
		EQUINUNK CREEK BASIN				
01427200	Equinunk Creek at Equinunk, Pa.	Lat 41°51'12", long 75°13'31", Wayne County, at bridge on State Highway 191, 0.3 mile upstream from mouth at Equinunk.	57.7	1978-80	4-24-80 5-20-80 6- 4-80 6-17-80 6-23-80 7-15-80 7-24-80 8-19-80 9-18-80	72 70 19 11 9.0 5.1 8.0 2.8 2.4
		LACKAWAXEN RIVER BASIN				
*01427950	West Branch Lackawaxen Creek near Aldenville, Pa.	Lat 41°40'28", long 75°22'35", Wayne County, at bridge on State Highway 247, 0.3 mile downstream from Johnsons Creek and 2 miles northwest of Aldenville. Datum of gage is 1,244.60 ft National Geodetic Vertical Datum of 1929.	40.6	1975-78 1980	6-24-80	8.3
*01429300	Dyberry Creek above reservoir near Honesdale, Pa.	Lat 41°39'26", long 75°17'12", Wayne County, on right bank 955 ft downstream from bridge on West Branch Dyberry Creek at Tanners Falls, 0.2 mile downstream from confluence of east and west branches of Dyberry Creek, and 6 miles north of Dyberry. Datum of gage is 1,023.43 ft National Geodetic Vertical Datum of 1929.	45.8	1975-78 1980	6-24-80	23
		TOMS CREEK BASIN				
01439400	Toms Creek at Egypt Mills near Bushkill, Pa.	Lat 41°07'29", long 74°57'14", Pike County, at bridge on U.S. Highway 209 at Egypt, 0.3 mile upstream from mouth and 3 miles northwest of Bushkill.	3.34	1970-80	4-23-80 9- 3-80	19 .03
		SHAWNEE CREEK BASIN				
01440250	Shawnee Creek at Shawnee on Delaware, Pa.	Lat 41°00'42", long 75°06'40", Monroe County, at bridge on State Highway 945 in village of Shawnee on Delaware, 0.6 mile upstream from mouth and 3 miles east of East Stroudsburg.	4.58	1970-80	4-23-80 9- 3-80	9.4 .50

* Also a crest-stage partial-record station.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at low-flow partial-record stations during water year 1980--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Measurements	
					Date	Discharge (cfs)
		BRODHEAD CREEK BASIN				
*01440900	McMichaels Creek near Stroudsburg, Pa.	Lat 40°58'04", long 75°13'08", Monroe County, at bridge on Dreher Avenue, 2 miles southwest of Stroudsburg and 3.2 miles upstream from mouth.	63.9	1975-77 1980	6-26-80	39.5
		JACOBY CREEK BASIN				
01443100	Jacoby Creek at Portland, Pa.	Lat 40°55'00", long 75°06'19", Northampton County, at county highway bridge, 0.6 mile southwest of Portland and 0.7 mile upstream from mouth.	6.17	1970-80	4-23-80 9- 3-80	15 3.8
		MARTINS CREEK BASIN				
*01446600	Martins Creek near East Bangor, Pa.	Lat 40°54'00", long 75°12'08", Northampton County, at stone-arch culvert on Township Road 722, 1.8 miles northwest of East Bangor.	10.4	1961-78≠ 1979-80	1-22-80 3-31-80 5- 2-80 6-26-80	9.4 48 27 .63
01446650	Martins Creek below Little Martins Creek at Martins Creek, Pa.	Lat 40°47'02", long 75°11'08", Northampton County, at bridge on U.S. Highway 611 in village of Martins Creek and 0.9 mile upstream from mouth.	43.4	1932 1970-80	4-23-80 9- 3-80	96 13
		LEHIGH RIVER BASIN				
*01450455	Buckwha Creek at Little Gap, Pa.	Lat 40°49'21", long 75°32'04", Carbon County, at bridge on L.R. 13035, 0.35 mile upstream from mouth and 0.75 mile south of Little Gap.	42.5	1975-80	3-12-80 8-28-80	28 7.3
01451192	Lehigh River at Allentown, Pa.	Lat 40°36'23", long 75°27'17", Lehigh County, on upstream side of Hamilton Street bridge, at Allentown, 200 ft downstream from lock and dam, and 0.7 mile upstream from Little Lehigh Creek.	1,033	1977-80	7- 3-80	796
*01452300	East Branch Monocacy Creek near Bath, Pa.	Lat 40°43'10", long 75°22'10", Northampton County, on left bank 25 ft downstream from bridge on L.R. 40863, 1.5 miles southeast of Bath, and 2.5 miles upstream from mouth. Datum of gage is 372.06 ft, National Geodetic Vertical Datum of 1929.	5.35	1962-68≠ 1969-80	3-12-80	1.6
		TINICUM CREEK BASIN				
*01458900	Tinicum Creek near Ottsville, Pa.	Lat 40°28'14", long 75°08'13", Bucks County, at concrete bridge on gravel road, 0.9 mile below confluence of Rapp Creek and Beaver Creek, 1.5 miles east of Ottsville, and 5.3 miles above mouth.	14.7	1971-80	3- 7-80 4-23-80 7- 3-80 9- 3-80	5.0 7.2 1.1 .09
		JERICHO CREEK BASIN				
01462300	Jericho Creek at Washington Crossing, Pa.	Lat 40°18'40", long 74°54'23", Bucks County, at bridge on Stage Highway 32, 0.3 mile upstream from mouth and 2.5 miles northwest of Washington Corssing.	9.52	1971-80	4-23-80 9- 3-80	6.4 0

* Also a crest-stage partial-record station.

≠ Operated as a continuous-record gaging station.

Discharge measurements made at low-flow partial-record stations during water year 1980--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (cfs)
		SCHUYLKILL RIVER BASIN				
*01467500	Schuylkill River at Pottsville, Pa.	Lat 40°40'53", long 76°11'25", Schuylkill County, at bridge on State Highway 61 at Pottsville and 1.7 miles downstream from Mill Creek.	53.4	1975-77 1979-80	5-29-80 7-17-80	104 43
*01467948	West Branch Schuylkill River near Cressona, Pa.	Lat 40°38'30", long 76°11'43", Schuylkill County, at bridge on Gordon-Nagle Trail, 0.75 mile upstream from Panther Creek and 1 mile north at Cressona.	52.5	1975-77 1979-80	5-29-80 7-17-80	76 52
*01470190	Little Schuylkill River at Port Clinton, Pa.	Lat 40°35'24", long 76°01'43", Schuylkill County, 0.65 mile upstream from Rattling Run and 0.7 mile north of Port Clinton.	132	1975-77 1979-80	5-28-80 7-17-80	194 85
*01470748	Sacony Creek near Virginville, Pa.	Lat 40°31'27", long 75°51'29", Berks County, at bridge on L.R. 06135, 1.0 mile upstream from mouth, and 1.0 mile east of Virginville.	54.1	1975-80	8-26-80	4.6
*01470766	Schuylkill River at Temple, Pa.	Lat 40°24'52", long 75°56'23", Berks County, at concrete bridge on State Highway Route 383, 0.7 mile downstream from mouth of Maiden Creek, 0.6 mile west of Temple.	641	1978-80	5-28-80	803
*01470810	Northkill Creek at Bernville, Pa.	Lat 40°26'22", long 76°07'12", Berks County, at bridge on State Highway 183, 0.3 mile upstream from Little Northkill Creek and 0.7 mile northwest of Bernville.	18.8	1975-77 1979-80	11-29-79 5-28-80 7-16-80	44.3 15.8 2.7
*01470818	Little Northkill Creek near Bernville, Pa.	Lat 40°26'33", long 76°07'23", Berks County, at bridge on L.R. 06013, 1.5 miles west of Bernville and 1.6 miles upstream from mouth.	21.2	1975-77 1979-80	5-28-80 7-16-80	17.9 2.4
*01471800	Pine Creek near Manatawny, Pa.	Lat 40°24'43", long 75°44'02", Berks County, at steel bridge on macadam road, at Lobachsville, 0.5 mile upstream from mouth, 0.5 mile below West Branch Pine Creek and 2 miles north of Manatawny.	15.6	1970-80	7- 9-80	4.1
*01472162	Schuylkill River at Phoenixville, Pa.	Lat 40°08'11", long 75°30'41", Chester County, on the downstream end of the left wingwall of Reading Railroad bridge across the mouth of French Creek at Phoenixville.	1,280	1979-80	8- 8-80	534
*01473193	Schuylkill River at Port Kennedy, Pa.	Lat 40°06'29", long 75°25'16", Montgomery County, on left bank 200 ft upstream from Betzwood Bridge, and 4.0 miles downstream from Perkiomen Creek at Port Kennedy.	1,691	1979-80	9-11-80	448
*01473470	Stony Creek at Norristown, Pa.	Lat 40°07'38", long 75°20'43", Montgomery County, on right bank at culvert on Steiger Street in Norristown, 0.1 mile downstream from dam, 0.7 mile downstream from unnamed tributary, and 1.1 miles upstream from mouth.	20.4	1975-80	3-12-80 6-24-80	12.1 3.6

* Also a crest-stage partial-record station.

Discharge measurements made at low-flow partial-record stations during water year 1980--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Measurements	
					Date	Discharge (cfs)
		DARBY CREEK BASIN				
*01475555	Hermesprota Creek at Darby, Pa.	Lat 39°54'02", long 75°16'19", Delaware County, on right bank at pipe arch culvert on Linden Ave. in Darby, and 1.7 miles upstream from mouth.	1.01	1975-80	2-28-80 6-25-80	1.4 .51
*01475560	Stony Creek at Prospect Park, Pa.	Lat 39°53'14", long 75°19'00", Delaware County, on left bank at concrete arch culvert and dam on 13th Street in Prospect Park.	2.29	1975-80	6-25-80	.73
*01475600	Muckinipattis Creek at Glenolden, Pa.	Lat 39°53'44", long 75°17'20", Delaware County, on left bank at Glenolden Ave. in Glenolden, 1.5 miles upstream from mouth.	3.50	1975-80	2-28-80 6-25-80	1.7 .87
		CRUM CREEK BASIN				
*01475850	Crum Creek near Newtown Square, Pa.	Lat 39°58'35", long 75°26'13", Delaware County, at Castle Rock Bridge on State Highway 3, 0.6 mile upstream from Preston Run, 0.8 mile upstream from Geist Reservoir and 2 miles west of Newtown Square.	15.8	1932 1949 1970-80	6-25-80	12.4
*01476000	Crum Creek at Woodlyn, Pa.	Lat 39°52'44", long 75°20'58", Delaware County, on right bank at bridge on Bullens Lane.	33.3	1931-37≠ 1975-80	2-26-80 6-25-80	24.5 3.9
		RIDLEY CREEK BASIN				
*01476435	Ridley Creek at Dutton Mill, near West Chester, Pa.	Lat 39°58'52", long 75°31'02", Chester County, on left bank at single span highway bridge on Strasburg Road, 0.1 mile west of Dutton Mill and 4.9 miles east of West Chester.	9.70	1975-80	10-23-79 3- 7-80 6-24-80	18 10 8.2
*01476500	Ridley Creek at Moylan, Pa.	Lat 39°54'08", long 75°23'32", Delaware County, on upstream left bank of Manchester Road bridge at intersection with Knowltown Road, at Moylan, and 1 mile south of Media.	31.9	1931-37≠ 1975-80	6-24-80	21
		CHESTER CREEK BASIN				
*01476836	East Branch Chester Creek near West Chester, Pa.	Lat 39°56'09", long 75°32'29", Chester County, at two-span highway bridge on Street Road, 0.4 mile upstream from Goose Run, 1.1 miles northwest of Cheyney, and 3.8 miles southeast of the intersection of State Route 100 and U.S. Highway 202.	10.8	1975-80	6-25-80	12
*01476853	East Branch Chester Creek at Cheyney, Pa.	Lat 39°55'58", long 75°31'03", Delaware County, at bridge on Station Road, 0.5 mile northeast of Cheyney, and 1.5 miles downstream from Goose Run.	22.8	1975-80	6-25-80	28
*01476950	West Branch Chester Creek near Chester Heights, Pa.	Lat 39°52'36", long 75°27'05", Delaware County, at single span bridge on Birney Road (SR 23017) at Aston Mills, Aston Township, 1.2 miles upstream from confluence with East Branch, and 1.8 miles southeast of Chester Heights.	18.0	1975-80	6-25-80	15

* Also a crest-stage partial-record station.
≠ Operated as a continuous-record gaging station.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at low-flow partial-record stations during water year 1980--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Measurements	
					Date	Discharge (cfs)
		CHRISTINA CREEK BASIN				
01478150	East Branch White Clay Creek at Landenberg, Pa.	Lat 30°46'40", long 75°46'18", Chester County, at county highway bridge at Landenberg, 1.4 miles downstream from Egypt River and 4 miles southeast of West Grove.	25.6	1970-78 1980	6-26-80	23
01479700	West Branch Red Clay Creek near Kennett Square, Pa.	Lat 39°48'39", long 75°42'19", Chester County, at county highway bridge on Kaolin Road, 1 mile upstream from East Branch Red Clay Creek, 1.4 miles east of Kaolin and 2.5 miles south of Kennett Square.	17.0	1970-78 1980	6-26-80	14

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1980

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft³/s)
		SHOHOLA CREEK BASIN				
Shohola Creek	Delaware River	Lat 41°27'20", long 74°55'25", Pike County, 1.4 miles above mouth and 1.4 miles south of Shohola.	83.6	1920-28≠ 1957 1959-67 1969-79	5-16-80 7-16-80 8-18-80 9-16-80	135 30 8.4 5.4
		BUSH KILL BASIN				
Bush Kill	Delaware River	Lat 41°24'30", long 74°44'35", Pike County, at bridge on State Highway 963 at Millrift, 200 ft upstream from mouth.	6.84	1958-68 1979	9- 5-80	.33
		CUMMINS CREEK BASIN				
Cummins Creek	Delaware River	Lat 41°20'40", long 74°45'41", Pike County, at bridge 300 ft upstream from U.S. Highways 6 and 209, and 2.5 miles northeast of Milford.	4.32	1943 1959-68 1979	9- 5-80	.01
		VANDERMARK CREEK BASIN				
Vandermark Creek	Delaware River	Lat 41°19'35", long 74°47'50", Pike County, at stone bridge on Broad Street in Milford, and 0.4 mile above mouth. Datum of gage is 490.50 ft National Geodetic Vertical Datum of 1929.	5.36	1962-79	9- 5-80	.07
		LEHIGH RIVER BASIN				
Lehigh River	Delaware River	Lat 40°49'45", long 75°42'20", Carbon County, at highway bridge at Lehighton, 0.3 mile upstream from Mahoning Creek.	591	1945-48≠ 1977-78 1979	7-31-80	223
		NESHAMINY CREEK BASIN				
Little Neshaminy Creek	Neshaminy Creek	Lat 40°13'28", long 75°07'53", Bucks County, on downstream side of center right bridge pier of bridge on Route 132 (Street Road), 0.5 mile southeast of Neshaminy and 0.3 mile northwest of Warminster Township.	25.5	-	11- 2-79 3- 6-80 4-16-80 5- 7-80 6-16-80 7- 7-80 9-10-80	14 9.7 39 17 5.8 4.6 1.6
Little Neshaminy Creek Tributary	Little Neshaminy Creek	Lat 40°13'44", long 75°06'38", Bucks County, on upstream left bank wingwall of bridge on Log College Drive at intersection with Gorson Drive in Warminster, 0.1 mile upstream from confluence with Little Neshaminy Creek.	1.50	-	11- 2-79 3- 6-80 4-22-80 5- 7-80 5-27-80 6-13-80 6-13-80	.86 3.4 1.3 .91 .26 .09 .11
Little Neshaminy Creek	Neshaminy Creek	Lat 40°14'06", long 75°05'31", Bucks County on downstream left bank of wingwall or bridge on Old York Road, 0.5 mile north of Hartsville.	30.2	-	11- 2-79 3-27-80 4-22-80 5-15-80 5-27-80 6-16-80 7- 7-80	22 66 33 32 18 12 10

≠ Operated as a continuous record station.

Discharge measurements made at miscellaneous sites during water year 1980--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
Little Neshaminy Creek Tributary	Little Neshaminy Creek	Lat 40°14'00", long 75°04'19", Bucks County, on upstream right bank wingwall of Bucks County Bridge No. 138 on Creek Road, 0.4 mile north-west of Traymore, 0.1 mile upstream from confluence with Little Neshaminy Creek.	4.34	-	10-30-79 3-12-80 4- 7-80 5-15-80 6-18-80 7-16-80 9-24-80	3.8 1.8 1.2 3.0 .62 .13 .21
Little Neshaminy Creek Tributary	Little Neshaminy Creek	Lat 40°14'12", long 75°03'34", Bucks County, on downstream right bank wingwall of bridge on Mearns Road at intersection with Almshouse Road, 0.6 mile north-east of Traymore, 0.7 mile north-west of Jacksonville, and 0.2 mile upstream from confluence with Little Neshaminy Creek.	2.77	-	10-30-79 3-12-80 4- 7-80 5-15-80 5-27-80 7- 1-80 7-16-80 8-11-80 9-24-80	4.7 1.4 6.3 2.7 2.2 .79 .29 .22 .07
		PENNYPACK CREEK BASIN				
Southampton Creek Tributary	Southampton Creek	Lat 40°10'27", long 75°04'36", Bucks County, on upstream left bank wingwall of bridge on County Line Road, 1.1 miles south-east of Lacey Park, and 1.0 mile upstream from confluence with Southampton Creek.	.90	-	10-30-79 10-30-79 3-27-80 4-21-80 5-29-80 6-19-80 7-28-80 8-11-80 9-20-80	.55 .44 1.4 1.2 .21 .10 .01 .06 .01
Pennypack Creek Tributary	Pennypack Creek	Lat 40°11'13", long 75°05'54", Bucks County, on upstream left bank wingwall of bridge on County Line Road, at Bonair.	1.18	-	10-30-79 3- 4-80 4-16-80 5- 7-80 5-29-80 6-19-80 6-28-80 8-11-80 9-24-80	.81 .44 1.7 1.2 .73 .37 .21 .47 .33
Pennypack Creek Tributary	Pennypack Creek	Lat 40°11'42", long 75°06'42", Bucks County, on upstream left bank wingwall of bridge on County Line Road, 0.8 mile south-west of Warminster Village, and 0.3 mile upstream from confluence with West Branch Pennypack Creek Tributary.	.92	-	11- 2-79 11- 2-79 3- 6-80 4-21-80 5-15-80 6-19-80 7- 1-80 7-28-80 8-11-80	.26 .24 .19 .38 .26 .08 .05 .02 .06
		SCHUYLKILL RIVER BASIN				
Pigeon Creek	Schuylkill River	Lat 40°12'03", long 75°32'10", Chester County, at bridge on Ellis Woods Road, 1.8 miles west of Parker Ford and 3.0 miles upstream from mouth.	12.0	1970-76 1978-79	3-18-80	53
Stony Run	Schuylkill River	Lat 40°10'01", long 75°32'57", Chester County, on downstream side of Pikeland Avenue bridge, 0.3 mile south of Spring City, and about 2.2 miles upstream from mouth.	4.07	1971-73 1975-76 1978-79	3-18-80	16

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1980--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
Pickering Creek	Schuylkill River	Lat 40°06'33", long 75°31'42", Chester County, at steel and timber bridge on Creek Road at State Highway 29, 0.3 mile downstream from Pennsylvania Railroad Bridge, 1 mile south of Phoenixville, and 2.6 miles upstream from Pickering Creek Reservoir.	31.4	1967-68 1975 1978-79	3- 7-80	30
					9- 9-80	8.1
Valley Creek	Schuylkill River	Lat 40°04'53", long 75°27'25", Chester County, at bridge on Wilson Road, 1 mile south of Valley Forge, 1.8 miles upstream from mouth, and 5 miles west of Norristown.	22.0	1972-73 1975 1977-79	3-12-80	26
					3-21-80	101
					8-11-80	14
		LAKE WALLENPAUPACK BASIN				
West Branch Wallenpaupack Creek	Lake Wallenpaupack	Lat 41°21'50", long 75°22'27", Wayne County, at bridge on L.R. 63066, 0.5 mile northeast off Route 191, 1.8 miles northeast of Sterling.	-	1979	10-17-79	39
					10-25-79	65
					12-11-79	52
					1-16-80	42
					3-11-80	49
					4-15-80	306
					5-22-80	41
					6-24-80	7.9
					7-16-80	17
					8- 7-80	30
					9-11-80	4.5
Ariel Creek	Lake Wallenpaupack	Lat 41°23'04", long 75°19'22", Wayne County, at private bridge just off L.R. 63008, 0.7 mile northeast of Ledgedale.	-	1979	10-17-79	12
					10-25-79	13
					12-11-79	6.6
					1-16-80	11
					2-14-80	3.6
					3-11-80	10
					4-15-80	118
					5-22-80	8.1
					6-24-80	4.1
					7-16-80	3.7
					8- 7-80	1.4
					9-11-80	.48
*Mill Brook	Lake Wallenpaupack	Lat 41°23'15", long 75°14'20", Pike County, at concrete box culvert on State Highway 507, 350 feet north of road to Bear Trap Mountain, 400 feet upstream from mouth, 1.8 miles south of Paupack.	4.84	1959-62 1964 1968-69 1971-74 1976 1979	10-17-79	5.0
					10-25-79	5.0
					12-11-79	5.3
					1-16-80	5.0
					2-14-80	1.6
					3-11-80	4.0
					3-21-80	30
					3-21-80	32
					4-15-80	66
					5-22-80	5.1
					6-24-80	2.1
					7-16-80	1.9
					8- 7-80	1.8
					9-11-80	1.2

*Also a crest-stage partial-record station.

Discharge measurements made at miscellaneous sites during water year 1980--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
Wallenpaupack Creek	Lake Wallenpaupack	Lat 41°20'09", long 75°20'26", Pike County, at bridge on Township Route 328, 0.4 mile northeast off Route 191, 0.7 mile north of East Sterling.	-	1979	10-17-79	149
					10-25-79	150
					12-11-79	130
					1-16-80	92
					2-14-80	44
					3-11-80	65
					4-15-80	1130
					5-22-80	94
					6-24-80	27
					7-16-80	30
					8- 7-80	19
					9-11-80	11
Purdy Creek	Lake Wallenpaupack	Lat 41°25'40", long 75°16'09", Wayne County, at bridge on L.R. 63009, 0.8 mile southeast of Lakeville.	-	1979	10-17-79	5.6
					10-25-79	6.5
					12-11-79	6.9
					1-16-80	6.6
					2-14-80	2.2
					3-11-80	4.7
					4-15-80	65
					5-22-80	6.5
					6-24-80	.71
					7-16-80	1.0
					8- 7-80	1.6
					9-11-80	.34

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

Water-quality partial-record stations are particular sites where chemical-quality, biological and or sediment data are collected systematically over a period of years for use in hydrologic analyses. The data are collected usually less than quarterly.

WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
01472054 - PIGEON CREEK NEAR BUCKTOWN, PA. (LAT 40 11 50 LONG 075 40 10)										
NOV , 1979 08...	1515	72	6.1	8.5	11.5	15	14	4.4	.0	13
01472065 - PIGEON CREEK NEAR PORTERS MILL, PA. (LAT 40 11 27 LONG 075 38 10)										
NOV , 1979 08...	1615	82	7.0	8.0	11.7	18	14	5.9	.0	15
01472080 - PIGEON CREEK NEAR PARKER FORD, PA. (LAT 40 12 03 LONG 075 37 10)										
NOV , 1979 14...	0930	99	6.2	6.0	12.4	23	17	8.4	.1	15
01472109 - STONY RUN NEAR SPRING CITY, PA. (LAT 40 10 11 LONG 075 34 45)										
NOV , 1979 09...	1115	170	6.4	10.0	11.8	26	25	19	.1	17
01472110 - STONY RUN AT SPRING CITY, PA. (LAT 40 10 01 LONG 075 32 57)										
NOV , 1979 09...	1300	165	6.7	11.0	13.0	27	27	16	.1	16
01472126 - FRENCH CREEK NEAR TRYTHALL, PA. (LAT 40 12 00 LONG 075 45 53)										
NOV , 1979 08...	1315	43	6.9	8.0	11.8	13	6.8	2.6	.1	8.8
01472129 - FRENCH CREEK NEAR KNAURERTOWN, PA. (LAT 40 11 09 LONG 075 45 28)										
NOV , 1979 08...	1230	52	6.6	7.0	12.2	18	7.1	4.1	.1	13
01472138 - FRENCH CREEK NEAR COVENTRYVILLE, PA. (LAT 40 10 14 LONG 075 41 50)										
NOV , 1979 09...	0900	110	6.5	8.0	11.2	24	10	6.6	.1	15
01472140 - S BR FRENCH CR AT COVENTRYVILLE, PA. (LAT 40 09 18 LONG 075 42 52)										
NOV , 1979 09...	0830	120	6.0	8.5	11.2	27	17	11	.1	18
01472154 - FRENCH CREEK NEAR PUGHTOWN, PA. (LAT 40 09 14 LONG 075 38 25)										
NOV , 1979 09...	1000	96	6.1	8.5	11.4	24	13	8.2	.1	45

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS NH4)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS, TOTAL (MG/L AS P)
01472054 - PIGEON CREEK NEAR BUCKTOWN, PA. (LAT 40 11 50 LONG 075 40 10)									
NOV , 1979									
08...	.89	.62	.000	.00	.25	.25	1.1	5.0	.030
01472065 - PIGEON CREEK NEAR PORTERS MILL, PA. (LAT 40 11 27 LONG 075 38 10)									
NOV , 1979									
08...	1.4	1.2	.000	.00	.20	.20	1.6	7.1	.030
01472080 - PIGEON CREEK NEAR PARKER FORD, PA. (LAT 40 12 03 LONG 075 37 10)									
NOV , 1979									
14...	2.2	2.2	.000	.00	.11	.11	2.3	10	.040
01472109 - STONY RUN NEAR SPRING CITY, PA. (LAT 40 10 11 LONG 075 34 45)									
NOV , 1979									
09...	--	6.3	.000	.00	.16	.16	--	--	.290
01472110 - STONY RUN AT SPRING CITY, PA. (LAT 40 10 01 LONG 075 32 57)									
NOV , 1979									
09...	--	6.3	.000	.00	.40	.40	--	--	.210
01472126 - FRENCH CREEK NEAR TRYTHALL, PA. (LAT 40 12 00 LONG 075 45 53)									
NOV , 1979									
08...	.13	.09	.060	.07	12	12	12	54	.030
01472129 - FRENCH CREEK NEAR KNAURERTOWN, PA. (LAT 40 11 09 LONG 075 45 28)									
NOV , 1979									
08...	--	.73	.010	.01	.12	.13	--	--	.010
01472138 - FRENCH CREEK NEAR COVENTRYVILLE, PA. (LAT 40 10 14 LONG 075 41 50)									
NOV , 1979									
09...	--	.72	.000	.00	.35	.35	--	--	.220
01472140 - S BR FRENCH CR AT COVENTRYVILLE, PA. (LAT 40 09 18 LONG 075 42 52)									
NOV , 1979									
09...	3.8	3.4	.030	.04	.26	.29	4.1	18	.400
01472154 - FRENCH CREEK NEAR PUGHTOWN, PA. (LAT 40 09 14 LONG 075 38 25)									
NOV , 1979									
09...	1.5	1.6	.000	.00	.12	.12	1.6	7.2	.110

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	PHOSPHORUS, TOTAL (MG/L AS PO4)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
01472054 - PIGEON CREEK NEAR BUCKTOWN, PA. (LAT 40 11 50 LONG 075 40 10)									
NOV , 1979 08...	.09	1	0	10	0	0	<.1	0	160
01472065 - PIGEON CREEK NEAR PORTERS MILL, PA. (LAT 40 11 27 LONG 075 38 10)									
NOV , 1979 08...	.09	1	0	10	0	0	<.1	0	10
01472080 - PIGEON CREEK NEAR PARKER FORD, PA. (LAT 40 12 03 LONG 075 37 10)									
NOV , 1979 14...	.12	0	0	20	0	0	<.1	0	150
01472109 - STONY RUN NEAR SPRING CITY, PA. (LAT 40 10 11 LONG 075 34 45)									
NOV , 1979 09...	.89	1	0	20	0	0	<.1	0	20
01472110 - STONY RUN AT SPRING CITY, PA. (LAT 40 10 01 LONG 075 32 57)									
NOV , 1979 09...	.64	1	0	20	0	0	.1	0	190
01472126 - FRENCH CREEK NEAR TRYTHALL, PA. (LAT 40 12 00 LONG 075 45 53)									
NOV , 1979 08...	.09	0	0	20	0	0	.1	0	140
01472129 - FRENCH CREEK NEAR KNAURERTOWN, PA. (LAT 40 11 09 LONG 075 45 28)									
NOV , 1979 08...	.03	--	--	--	--	--	--	--	--
01472138 - FRENCH CREEK NEAR COVENTRYVILLE, PA. (LAT 40 10 14 LONG 075 41 50)									
NOV , 1979 09...	.67	0	0	20	0	0	.1	0	180
01472140 - S BR FRENCH CR AT COVENTRYVILLE, PA. (LAT 40 09 18 LONG 075 42 52)									
NOV , 1979 09...	1.2	0	0	<10	10	0	<.1	0	10
01472154 - FRENCH CREEK NEAR PUGHTOWN, PA. (LAT 40 09 14 LONG 075 38 25)									
NOV , 1979 09...	.34	0	0	10	0	0	<.1	0	10

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
01472161 - FRENCH CREEK AT PHOENIXVILLE, PA. (LAT 40 08 07 LONG 075 31 05) a/										
NOV , 1979 14...	1130	128	6.8	7.5	10.4	32	19	11	.1	16
01472170 - PICKERING CREEK NEAR EAGLE, PA. (LAT 40 04 43 LONG 075 39 14)										
NOV , 1979 01...	1415	220	7.8	13.0	11.8	9	16	18	.1	17
01472184 - PICKERING CREEK AT PIKELAND, PA. (LAT 40 06 13 LONG 075 36 03) b/										
NOV , 1979 05...	1500	110	6.5	9.0	12.2	34	17	14	.1	17
01472188 - PICKERING CREEK AT CHARLESTOWN, PA. (LAT 40 06 05 LONG 075 34 17)										
OCT , 1979 29...	1400	230	7.6	10.5	12.1	35	--	--	.1	18
01472190 - PICKERING CREEK NEAR PHOENIXVILLE, PA. (LAT 40 06 33 LONG 075 31 42)										
OCT , 1979 29...	1515	180	7.7	10.7	12.0	35	19	17	.1	18
01473167 - LITTLE VALLEY CR NR VALLEY FORGE, PA. (LAT 40 03 51 LONG 075 28 22)										
NOV , 1979 05...	1000	290	7.7	8.5	11.6	140	32	33	.3	7.2
01473168 - VALLEY CREEK NR VALLEY FORGE, PA. (LAT 40 04 08 LONG 075 28 25)										
NOV , 1979 05...	1100	370	7.2	8.0	12.8	190	39	33	.1	7.1
01475830 - EAST BRANCH CRUM CREEK NEAR PAOLI, PA. (LAT 40 00 28 LONG 075 27 55)										
OCT , 1979 30...	1400	290	6.8	10.5	12.4	42	14	16	.1	13
01475840 - WEST BRANCH CRUM CREEK NEAR PAOLI, PA. (LAT 39 59 52 LONG 075 27 38)										
OCT , 1979 30...	1430	250	6.9	10.0	12.3	37	13	12	.1	15
01476430 - RIDLEY CREEK NEAR GOSHENVILLE, PA. (LAT 39 59 26 LONG 075 32 38)										
OCT , 1979 31...	1030	200	6.8	8.0	12.4	23	14	15	.1	9.9

a/Additional data for this site are published in the section, Analyses of samples collected at Schuylkill River Quality Assessment Sites.

b/Water quality data for this site were published under station number 01472186 in 1975 and under station number 01472185 in 1977, 1978, and 1979.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS NH4)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)
01472161 - FRENCH CREEK AT PHOENIXVILLE, PA. (LAT 40 08 07 LONG 075 31 05)									
NOV , 1979									
14...	1.7	1.6	.000	.00	.53	.53	2.2	9.9	.030
01472170 - PICKERING CREEK NEAR EAGLE, PA. (LAT 40 04 43 LONG 075 39 14)									
NOV , 1979									
01...	2.5	2.0	.020	.02	.44	.46	3.0	13	.080
01472184 - PICKERING CREEK AT PIKELAND, PA. (LAT 40 08 13 LONG 075 36 03)									
NOV , 1979									
05...	1.6	--	.010	.01	.14	.15	1.8	7.7	.010
01472188 - PICKERING CREEK AT CHARLESTOWN, PA. (LAT 40 06 05 LONG 075 34 17)									
OCT , 1979									
29...	1.6	1.4	.010	.01	1.6	1.6	3.2	14	.200
01472190 - PICKERING CREEK NEAR PHOENIXVILLE, PA. (LAT 40 06 33 LONG 075 31 42)									
OCT , 1979									
29...	1.6	--	.000	.00	.36	.36	2.0	8.7	.010
01473167 - LITTLE VALLEY CR NR VALLEY FORGE, PA. (LAT 40 03 51 LONG 075 28 22)									
NOV , 1979									
05...	3.0	2.8	.060	.07	.19	.25	3.3	14	.060
01473168 - VALLEY CREEK NR VALLEY FORGE, PA. (LAT 40 04 08 LONG 075 28 25)									
NOV , 1979									
05...	2.1	2.0	.060	.07	.20	.26	2.4	10	.020
01475830 - EAST BRANCH CRUM CREEK NEAR PAOLI, PA. (LAT 40 00 28 LONG 075 27 55)									
OCT , 1979									
30...	2.4	2.4	.070	.08	.84	.91	3.3	15	.020
01475840 - WEST BRANCH CRUM CREEK NEAR PAOLI, PA. (LAT 39 59 52 LONG 075 27 38)									
OCT , 1979									
30...	2.0	1.8	.060	.07	.79	.85	2.9	13	.010
01476430 - RIDLEY CREEK NEAR GOSHENVILLE, PA. (LAT 39 59 26 LONG 075 32 38)									
OCT , 1979									
31...	2.5	2.2	.060	.07	1.5	1.6	4.1	18	.050

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	PHOSPHORUS, TOTAL (MG/L AS PO4)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
01472161 - FRENCH CREEK AT PHOENIXVILLE, PA. (LAT 40 08 07 LONG 075 31 05)									
NOV , 1979 14...	.09	1	0	20	0	0	.2	0	20
01472170 - PICKERING CREEK NEAR EAGLE, PA. (LAT 40 04 43 LONG 075 39 14)									
NOV , 1979 01...	.18	0	0	10	10	0	<.1	0	20
01472184 - PICKERING CREEK AT PIKELAND, PA. (LAT 40 06 13 LONG 075 36 03)									
NOV , 1979 05...	.03	1	0	10	0	0	<.1	0	10
01472188 - PICKERING CREEK AT CHARLESTOWN, PA. (LAT 40 06 05 LONG 075 34 17)									
OCT , 1979 29...	.61	0	0	10	10	0	.2	0	10
01472190 - PICKERING CREEK NEAR PHOENIXVILLE, PA. (LAT 40 06 33 LONG 075 31 42)									
OCT , 1979 29...	.03	0	0	20	10	0	.1	0	10
01473167 - LITTLE VALLEY CR NR VALLEY FORGE, PA. (LAT 40 03 51 LONG 075 28 22)									
NOV , 1979 05...	.18	0	0	10	10	0	<.1	0	20
01473168 - VALLEY CREEK NR VALLEY FORGE, PA. (LAT 40 04 08 LONG 075 28 25)									
NOV , 1979 05...	.06	1	0	10	10	0	<.1	1	10
01475830 - EAST BRANCH CRUM CREEK NEAR PAOLI, PA. (LAT 40 00 28 LONG 075 27 55)									
OCT , 1979 30...	.06	0	0	10	10	0	.2	0	0
01475840 - WEST BRANCH CRUM CREEK NEAR PAOLI, PA. (LAT 39 59 52 LONG 075 27 38)									
OCT , 1979 30...	.03	0	0	20	10	0	.2	0	10
01476430 - RIDLEY CREEK NEAR GOSHENVILLE, PA. (LAT 39 59 26 LONG 075 32 38)									
OCT , 1979 31...	.15	0	0	10	10	0	.2	0	10

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
01476435 - RIDLEY CREEK NEAR DUTTON MILL, PA. (LAT 39 58 50 LONG 075 31 00)										
OCT , 1979										
30...	1530	185	6.9	10.5	12.2	24	14	15	.1	13
01476790 - CHESTER CREEK NEAR WEST CHESTER, PA. (LAT 39 59 49 LONG 075 35 40)										
OCT , 1979										
31...	1115	280	6.3	10.5	11.8	19	14	27	.1	7.9
01476830 - CHESTER CREEK NEAR MILLTOWN, PA. (LAT 39 58 21 LONG 075 32 57)										
OCT , 1979										
31...	0830	250	6.5	8.0	11.8	41	23	19	.1	15
01476835 - CHESTER CREEK AT WESTTOWN SCHOOL, PA. (LAT 39 56 21 LONG 075 32 28)										
OCT , 1979										
31...	1315	310	6.8	7.0	10.9	42	24	19	.1	18
01476840 - GOOSE CREEK NEAR WEST CHESTER, PA. (LAT 39 56 01 LONG 075 33 31)										
OCT , 1979										
31...	1430	1010	7.3	9.0	5.9	110	91	130	.1	22
01478120 - WHITE CLAY CREEK NEAR AVONDALE, PA. (LAT 39 49 39 LONG 075 46 52)										
NOV , 1979										
06...	1330	185	6.8	8.0	13.2	73	25	13	.1	15
01478190 - WHITE CLAY CREEK NEAR WICKERTON, PA. (LAT 39 47 44 LONG 075 49 27)										
NOV , 1979										
06...	1130	115	6.4	8.0	12.4	27	15	12	.1	14
01478220 - W BR WHITE CLAY CR NR CHESTERVILLE, PA. (LAT 39 45 56 LONG 075 47 47)										
NOV , 1979										
06...	1030	92	6.6	6.5	12.8	20	17	10	.1	13
01479780 - RED CLAY CREEK NEAR KENNETT SQUARE, PA. (LAT 39 50 13 LONG 075 43 33)										
NOV , 1979										
06...	0800	150	6.1	6.5	11.8	54	24	11	.1	15
01479800 - RED CLAY CREEK NEAR FIVE POINT, PA. (LAT 39 49 11 LONG 075 41 29)										
NOV , 1979										
06...	0900	170	6.5	6.0	12.4	52	33	15	.1	56

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS NH4)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)
01476435 - RIDLEY CREEK NEAR DUTTON MILL, PA. (LAT 39 58 50 LONG 075 31 00)									
OCT , 1979									
30...	2.5	2.4	.200	.24	.19	.39	2.9	13	.040
01476790 - CHESTER CREEK NEAR WEST CHESTER, PA. (LAT 39 59 49 LONG 075 35 40)									
OCT , 1979									
31...	4.2	4.2	.000	.00	.19	.19	4.4	19	.010
01476830 - CHESTER CREEK NEAR MILLTOWN, PA. (LAT 39 58 21 LONG 075 32 57)									
OCT , 1979									
31...	2.6	2.6	.180	.19	1.2	1.4	4.0	18	.030
01476835 - CHESTER CREEK AT WESTTOWN SCHOOL, PA. (LAT 39 56 21 LONG 075 32 28)									
OCT , 1979									
31...	2.8	2.6	.180	.22	1.2	1.4	4.2	19	.220
01476840 - GOOSE CREEK NEAR WEST CHESTER, PA. (LAT 39 56 01 LONG 075 33 31)									
OCT , 1979									
31...	17	16	27.000	33	100	130	150	650	7.300
01478120 - WHITE CLAY CREEK NEAR AVONDALE, PA. (LAT 39 49 39 LONG 075 46 52)									
NOV , 1979									
06...	4.6	4.3	.010	.01	.22	.23	4.8	21	.020
01478190 - WHITE CLAY CREEK NEAR WICKERTON, PA. (LAT 39 47 44 LONG 075 49 27)									
NOV , 1979									
06...	4.3	3.8	.010	.01	.43	.44	4.7	21	.100
01478220 - W BR WHITE CLAY CR NR CHESTERVILLE, PA. (LAT 39 45 56 LONG 075 47 47)									
NOV , 1979									
06...	--	2.9	.040	.05	.15	.19	--	--	.100
01479780 - RED CLAY CREEK NEAR KENNETT SQUARE, PA. (LAT 39 50 13 LONG 075 43 33)									
NOV , 1979									
06...	3.7	3.5	.010	.01	.22	.23	3.9	17	.080
01479800 - RED CLAY CREEK NEAR FIVE POINT, PA. (LAT 39 49 11 LONG 075 41 29)									
NOV , 1979									
06...	--	3.7	.190	.23	.21	.40	--	--	.180

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	PHOS-PHORUS, TOTAL (MG/L AS PO4)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
01476435 - RIDLEY CREEK NEAR DUTTON MILL, PA. (LAT 39 58 50 LONG 075 31 00)									
OCT , 1979									
30...	.12	0	0	10	0	0	.2	0	0
01476790 - CHESTER CREEK NEAR WEST CHESTER, PA. (LAT 39 59 49 LONG 075 35 40)									
OCT , 1979									
31...	.03	0	0	10	10	0	.1	0	10
01476830 - CHESTER CREEK NEAR MILLTOWN, PA. (LAT 39 58 21 LONG 075 32 57)									
OCT , 1979									
31...	.09	0	0	10	10	0	.1	0	10
01476835 - CHESTER CREEK AT WESTTOWN SCHOOL, PA. (LAT 39 56 21 LONG 075 32 28)									
OCT , 1979									
31...	.67	0	0	10	10	0	.2	0	10
01476840 - GOOSE CREEK NEAR WEST CHESTER, PA. (LAT 39 56 01 LONG 075 33 31)									
OCT , 1979									
31...	22	2	0	10	50	0	2.9	1	360
01478120 - WHITE CLAY CREEK NEAR AVONDALE, PA. (LAT 39 49 39 LONG 075 46 52)									
NOV , 1979									
06...	.08	0	0	10	0	0	<.1	1	10
01478190 - WHITE CLAY CREEK NEAR WICKERTON, PA. (LAT 39 47 44 LONG 075 49 27)									
NOV , 1979									
06...	.31	0	0	10	0	0	<.1	0	10
01478220 - W BR WHITE CLAY CR NR CHESTERVILLE, PA. (LAT 39 45 56 LONG 075 47 47)									
NOV , 1979									
06...	.31	0	0	10	10	0	<.1	0	10
01479780 - RED CLAY CREEK NEAR KENNETT SQUARE, PA. (LAT 39 50 13 LONG 075 43 33)									
NOV , 1979									
06...	.18	0	0	10	0	0	<.1	0	10
01479800 - RED CLAY CREEK NEAR FIVE POINT, PA. (LAT 39 49 11 LONG 075 41 29)									
NOV , 1979									
06...	.55	0	0	10	10	0	<.1	0	10

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
01480430 - W BR BRANDYWINE CR NR COATESVILLE, PA. (LAT 40 00 17 LONG 075 49 31)										
NOV , 1979										
02...	1245	180	7.2	10.0	12.0	32	16	11	.1	13
01480629 - BUCK RUN NEAR DOE RUN, PA. (LAT 39 55 44 LONG 075 49 47)										
NOV , 1979										
07...	1000	120	6.5	9.0	12.0	25	17	14	.0	8.1
01480632 - DOE RUN NEAR SPRINGDALE, PA. (LAT 39 54 21 LONG 075 49 42)										
NOV , 1979										
07...	1045	85	6.1	9.0	11.9	16	11	10	.0	9.2
01480640 - WEST BRANCH BRANDYWINE CREEK AT WAWASET, PA. (LAT 39 55 34 LONG 075 39 47)										
NOV , 1979										
02...	1400	190	7.0	14.0	11.9	38	18	13	.3	9.7
01480647 - E BR BRANDYWINE CR NR STRUBLE DAM, PA. (LAT 40 06 05 LONG 075 51 40)										
NOV , 1979										
08...	0830	110	6.8	7.5	10.6	35	14	11	.1	9.0
01480648 - EAST BRANCH BRANDYWINE CREEK NEAR CUPOLA, PA. (LAT 40 05 41 LONG 075 51 14)										
NOV , 1979										
07...	1600	105	6.5	10.0	11.0	37	13	9.1	.1	13
01480655 - EAST BR. BRANDYWINE CREEK NEAR GLENMOORE, PA. (LAT 40 04 25 LONG 075 49 01)										
NOV , 1979										
08...	1000	100	6.6	6.5	11.6	30	13	9.3	.1	15
01480656 - INDIAN RUN NEAR SPRINGTON, PA. (LAT 40 04 30 LONG 075 46 57)										
NOV , 1979										
08...	1045	110	6.8	7.0	12.6	32	7.7	7.9	.1	23
01480903 - VALLEY CREEK AT MULLSTEINS MEADOWS, PA. (LAT 39 58 31 LONG 075 39 48)										
NOV , 1979										
02...	1045	390	7.4	10.5	12.8	91	28	17	.1	6.3
01480950 - EAST BRANCH BRANDYWINE CREEK AT WAWASET, PA. (LAT 39 55 31 LONG 075 38 55)										
NOV , 1979										
02...	1445	295	6.7	13.0	12.1	50	21	15	.1	11

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS NH4)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)
01480430 - W BR BRANDYWINE CR NR COATESVILLE, PA. (LAT 40 00 17 LONG 075 49 31)									
NOV , 1979 02...	--	1.5	.050	.06	.24	.29	--	--	2.600
01480629 - BUCK RUN NEAR DOE RUN, PA. (LAT 39 55 44 LONG 075 49 47)									
NOV , 1979 07...	4.5	4.4	.100	.12	.38	.48	5.0	22	.030
01480632 - DOE RUN NEAR SPRINGDALE, PA. (LAT 39 54 21 LONG 075 49 42)									
NOV , 1979 07...	4.4	4.2	.040	.05	.01	.05	4.5	20	.020
01480640 - WEST BRANCH BRANDYWINE CREEK AT WAWASET, PA. (LAT 39 55 34 LONG 075 39 47)									
NOV , 1979 02...	--	2.6	.030	.04	.14	.17	--	--	2.100
01480647 - E BR BRANDYWINE CR NR STRUBLE DAM, PA. (LAT 40 06 05 LONG 075 51 40)									
NOV , 1979 08...	--	2.8	.100	.12	.78	.88	--	--	.040
01480648 - EAST BRANCH BRANDYWINE CREEK NEAR CUPOLA, PA. (LAT 40 05 41 LONG 075 51 14)									
NOV , 1979 07...	2.5	--	.060	.07	.73	.79	3.3	15	.380
01480655 - EAST BR. BRANDYWINE CREEK NEAR GLENMOORE, PA. (LAT 40 04 25 LONG 075 49 01)									
NOV , 1979 08...	2.8	--	.030	.04	.29	.32	3.1	14	2.500
01480656 - INDIAN RUN NEAR SPRINGTON, PA. (LAT 40 04 30 LONG 075 46 57)									
NOV , 1979 08...	2.5	2.5	.000	.00	.20	.20	2.7	12	.050
01480903 - VALLEY CREEK AT MULLSTEINS MEADOWS, PA. (LAT 39 58 31 LONG 075 39 48)									
NOV , 1979 02...	3.5	3.3	.040	.05	.44	.48	4.0	18	.920
01480950 - EAST BRANCH BRANDYWINE CREEK AT WAWASET, PA. (LAT 39 55 31 LONG 075 38 55)									
NOV , 1979 02...	--	1.5	.020	.02	.24	.26	--	--	.290

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	PHOS- PHORUS, TOTAL (MG/L AS PO4)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
01480430 - W BR BRANDYWINE CR NR COATESVILLE, PA. (LAT 40 00 17 LONG 075 49 31)									
NOV , 1979									
02...	8.0	0	0	10	10	0	<.1	0	10
01480629 - BUCK RUN NEAR DOE RUN, PA. (LAT 39 55 44 LONG 075 49 47)									
NOV , 1979									
07...	.09	0	0	10	0	0	<.1	0	10
01480632 - DOE RUN NEAR SPRINGDALE, PA. (LAT 39 54 21 LONG 075 49 42)									
NOV , 1979									
07...	.06	0	0	10	0	0	<.1	0	10
01480640 - WEST BRANCH BRANDYWINE CREEK AT WAWASET, PA. (LAT 39 55 34 LONG 075 39 47)									
NOV , 1979									
02...	6.4	0	0	10	10	0	<.1	0	10
01480647 - E BR BRANDYWINE CR NR STRUBLE DAM, PA. (LAT 40 06 05 LONG 075 51 40)									
NOV , 1979									
08...	.12	1	0	10	0	0	<.1	0	10
01480648 - EAST BRANCH BRANDYWINE CREEK NEAR CUPOLA, PA. (LAT 40 05 41 LONG 075 51 14)									
NOV , 1979									
07...	1.2	1	0	<10	0	0	<.1	0	10
01480655 - EAST BR. BRANDYWINE CREEK NEAR GLENMOORE, PA. (LAT 40 04 25 LONG 075 49 01)									
NOV , 1979									
08...	7.7	0	0	<10	10	0	<.1	0	10
01480656 - INDIAN RUN NEAR SPRINGTON, PA. (LAT 40 04 30 LONG 075 46 57)									
NOV , 1979									
08...	.15	0	0	20	0	0	.1	0	10
01480903 - VALLEY CREEK AT MULLSTEINS MEADOWS, PA. (LAT 39 58 31 LONG 075 39 48)									
NOV , 1979									
02...	2.8	0	0	20	0	0	<.1	0	10
01480950 - EAST BRANCH BRANDYWINE CREEK AT WAWASET, PA. (LAT 39 55 31 LONG 075 38 55)									
NOV , 1979									
02...	.89	0	0	10	10	0	<.1	0	10

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
01494900 - ELK CREEK AT ELKVIEW, PA. (LAT 39 48 45 LONG 075 54 04)										
NOV , 1979										
06...	1500	95	5.9	8.5	11.8	23	9.9	11	.1	12
01494950 - ELK CREEK NEAR OXFORD, PA. (LAT 39 46 45 LONG 075 55 27)										
NOV , 1979										
06...	1545	95	5.7	9.0	12.7	19	9.2	12	.1	11

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS NH4)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)
01494900 - ELK CREEK AT ELKVIEW, PA. (LAT 39 48 45 LONG 075 54 04)									
NOV , 1979									
06...	--	3.9	.090	.11	1.2	1.3	--	--	.160
01494950 - ELK CREEK NEAR OXFORD, PA. (LAT 39 46 45 LONG 075 55 27)									
NOV , 1979									
06...	4.2	3.8	.070	.08	.47	.54	4.7	21	.070

DATE	PHOSPHORUS, TOTAL (MG/L AS PO4)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
01494900 - ELK CREEK AT ELKVIEW, PA. (LAT 39 48 45 LONG 075 54 04)									
NOV , 1979									
06...	.49	0	0	10	10	0	<.1	0	20
01494950 - ELK CREEK NEAR OXFORD, PA. (LAT 39 46 45 LONG 075 55 27)									
NOV , 1979									
06...	.21	0	0	<10	0	0	<.1	0	10

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	ACIDITY (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
01426700 - BALLS CREEK NEAR WINTERDALE, PA. (LAT 41 58 05 LONG 075 20 10)											
JUN , 1980 24...	1700	.32	80	7.2	22.5	27	7	6.0	8.5	1.5	2.1
JUL 22...	0700	3.2	89	7.1	20.0	29	3	4.0	9.0	1.5	2.1
01427300 - LITTLE EQUINUNK CREEK AT STALKER, PA. (LAT 41 49 30 LONG 075 07 15)											
JUN , 1980 24...	1430	2.0	74	7.3	23.0	24	10	2.0	7.5	1.2	2.3
JUL 21...	1530	2.1	80	7.4	27.0	24	6	2.0	7.8	1.2	2.5
01427700 - CALKINS CREEK AT MILANVILLE, PA. (LAT 41 40 10 LONG 075 04 10)											
JUN , 1980 24...	1150	2.1	88	7.3	21.5	28	10	5.0	8.4	1.6	3.0
JUL 21...	1300	1.2	94	7.5	27.5	29	3	10	8.7	1.7	3.1
01428200 - MASTHOPE CREEK AT MASTHOPE, PA. (LAT 41 32 15 LONG 075 01 40)											
JUN , 1980 24...	0900	3.6	65	6.9	18.0	18	4	4.0	4.8	1.5	2.7
JUL 22...	1030	2.8	69	7.2	22.5	19	1	2.0	5.1	1.4	2.5
01432100 - BLOOMING GROVE CREEK NEAR ROWLAND, PA. (LAT 41 28 00 LONG 075 04 35)											
JUN , 1980 23...	1310	9.3	62	6.6	19.5	14	10	12	3.5	1.2	3.3
JUL 22...	1400	4.8	65	7.1	24.0	14	3	2.0	3.9	1.1	2.9
01439700 - LITTLE BUSH KILL AT BUSHKILL, PA (LAT 41 05 30 LONG 075 00 10)											
JUN , 1980 26...	0920	7.0	52	7.1	17.5	15	2	--	3.6	1.5	2.2
JUL 24...	0800	8.0	56	6.8	19.0	14	3	--	3.6	1.2	2.0
01440500 - PARADISE CREEK AT HENRYVILLE, PA. (LAT 41 06 00 LONG 075 15 05)											
JUN , 1980 25...	1600	20	90	7.1	24.0	19	11	2.0	5.2	1.5	5.7
JUL 23...	1700	11	89	7.5	24.5	19	4	2.0	5.4	1.4	5.1

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
01426700 - BALLS CREEK NEAR WINTERDALE, PA. (LAT 41 58 05 LONG 075 20 10)											
JUN , 1980											
24...	14	.2	1.0	20	8.8	1.5	.1	2.4	38	41	.05
JUL											
22...	13	.2	1.2	26	8.5	1.7	.1	3.1	49	45	.07
01427300 - LITTLE EQUINUNK CREEK AT STALKER, PA. (LAT 41 49 30 LONG 075 07 15)											
JUN , 1980											
24...	17	.2	1.1	14	8.7	2.9	.1	2.0	39	37	.05
JUL											
21...	17	.2	1.2	18	8.3	3.3	.1	1.9	44	38	.06
01427700 - CALKINS CREEK AT MILANVILLE, PA. (LAT 41 40 10 LONG 075 04 10)											
JUN , 1980											
24...	18	.2	1.4	18	11	3.3	.1	3.1	44	45	.06
JUL											
21...	18	.3	1.5	26	11	3.8	.1	3.2	60	49	.08
01428200 - MASTHOPE CREEK AT MASTHOPE, PA. (LAT 41 32 15 LONG 075 01 40)											
JUN , 1980											
24...	23	.3	.9	14	7.9	2.8	.1	2.8	34	33	.05
JUL											
22...	22	.3	.9	18	6.8	2.6	.1	3.0	41	33	.06
01432100 - BLOOMING GROVE CREEK NEAR ROWLAND, PA. (LAT 41 28 00 LONG 075 04 35)											
JUN , 1980											
23...	33	.4	.7	4	8.6	4.9	.1	3.3	38	29	.05
JUL											
22...	29	.3	.7	11	8.2	4.6	.1	2.7	30	31	.04
01439700 - LITTLE BUSH KILL AT BUSHKILL, PA (LAT 41 05 30 LONG 075 00 10)											
JUN , 1980											
26...	23	.2	.5	13	6.8	2.0	.1	4.2	34	30	.05
JUL											
24...	23	.2	.5	8	6.6	2.0	.1	4.4	29	28	.04
01440500 - PARADISE CREEK AT HENRYVILLE, PA. (LAT 41 06 00 LONG 075 15 05)											
JUN , 1980											
25...	38	.6	.7	8	8.0	10	.0	3.5	44	41	.06
JUL											
23...	36	.5	.7	15	7.6	9.7	.1	2.2	48	42	.07

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)	PHOS- PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS PO4)
01426700 - BALLS CREEK NEAR WINTERDALE, PA. (LAT 41 58 05 LONG 075 20 10)										
JUN , 1980 24...	.03	.61	.010	.01	.06	.07	.68	.020	.000	.00
JUL 22...	.43	.47	--	--	--	--	--	--	--	--
01427300 - LITTLE EQUINUNK CREEK AT STALKER, PA. (LAT 41 49 30 LONG 075 07 15)										
JUN , 1980 24...	.21	.64	.010	.01	.11	.12	.76	.020	.010	.03
JUL 21...	.25	.23	.000	.00	.01	.01	.24	.040	.020	.06
01427700 - CALKINS CREEK AT MILANVILLE, PA. (LAT 41 40 10 LONG 075 04 10)										
JUN , 1980 24...	.25	.43	.020	.03	.06	.08	.51	.030	.020	.06
JUL 21...	.19	.12	.000	.00	.01	.01	.13	.030	.020	.06
01428200 - MASTHOPE CREEK AT MASTHOPE, PA. (LAT 41 32 15 LONG 075 01 40)										
JUN , 1980 24...	.33	.14	.020	.03	.16	.18	.32	.020	.000	.00
JUL 22...	.31	.04	.000	.00	.41	.41	.45	.020	.010	.03
01432100 - BLOOMING GROVE CREEK NEAR ROWLAND, PA. (LAT 41 28 00 LONG 075 04 35)										
JUN , 1980 23...	.95	.18	.010	.01	.09	.10	.28	.020	.000	.00
JUL 22...	.39	.07	.000	.00	.47	.47	.54	.020	.000	.00
01439700 - LITTLE BUSH KILL AT BUSHKILL, PA (LAT 41 05 30 LONG 075 00 10)										
JUN , 1980 26...	.64	.28	.020	.03	.09	.11	.39	.020	.030	.09
JUL 24...	.63	.32	.150	.19	.45	.60	.92	.040	.010	.03
01440500 - PARADISE CREEK AT HENRYVILLE, PA. (LAT 41 06 00 LONG 075 15 05)										
JUN , 1980 25...	2.32	.36	.030	.04	.21	.24	.60	.050	.020	.06
JUL 23...	1.41	.12	.020	.03	.77	.79	.91	.050	.020	.06

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
				01447000 - DELAWARE R AT NORTHAMPTON ST AT EASTON PA (LAT 40 41 30 LONG 075 12 15)							
OCT , 1979											
17...	0945	--	--	10.0	10.4	1.0	20	21	43	22	12
MAR , 1980											
26...	0945	82	--	3.5	12.4	1.6	130	23	27	11	7.5
JUN											
03...	0945	168	7.9	23.0	7.9	3.3	20	49	54	16	14
JUL											
15...	0945	152	7.7	26.0	7.9	5.0	330	70	54	12	15
AUG											
19...	0930	--	7.6	23.0	7.3	<.7	40	7	73	17	18
SEP											
30...	1015	117	7.4	19.0	10.0	E.3	<20	13	43	14	12

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	SODIUM+POTASSIUM DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
				01447000 - DELAWARE R AT NORTHAMPTON ST AT EASTON PA (LAT 40 41 30 LONG 075 12 15)							
OCT , 1979											
17...	3.1	4.2	17	.3	5.0	.8	21	--	15	5.9	.1
MAR , 1980											
26...	2.0	3.9	23	.3	4.8	.9	16	--	11	5.8	.1
JUN											
03...	4.5	7.8	24	.5	--	.9	38	.0	21	8.6	.1
JUL											
15...	4.1	6.1	19	.4	--	1.2	42	--	18	9.3	.1
AUG											
19...	6.8	8.4	20	.4	--	1.6	56	--	22	11	.1
SEP											
30...	3.1	6.2	23	.4	--	1.1	29	--	14	7.9	.1

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)
				01447000 - DELAWARE R AT NORTHAMPTON ST AT EASTON PA (LAT 40 41 30 LONG 075 12 15)						
OCT , 1979										
17...	4.0	75	58	.10	--	--	<1.0	.200	.34	.54
MAR , 1980										
26...	3.4	58	44	.08	--	--	.55	.210	1.3	1.5
JUN										
03...	1.5	--	81	.11	.63	.030	.66	.210	.34	.55
JUL										
15...	1.6	98	81	.13	.54	.020	.56	.260	.84	1.1
AUG										
19...	4.7	119	106	.16	.53	.030	.55	<.030	--	.83
SEP										
30...	1.1	73	63	.10	.42	.010	.43	.240	.59	.83

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
01447000 - DELAWARE R AT NORTHAMPTON ST AT EASTON PA (LAT 40 41 30 LONG 075 12 15)										
OCT , 1979										
17...	--	--	.08	--	--	--	--	--	--	--
MAR , 1980										
26...	2.0	9.1	.14	--	--	--	--	--	--	--
JUN										
03...	1.2	5.4	.05	20	1	0	30	0	<10	4
JUL										
15...	1.7	7.3	.03	--	--	--	--	--	--	--
AUG										
19...	1.2	5.2	.12	--	--	--	--	--	--	--
SEP										
30...	1.3	5.6	.06	--	--	--	--	--	--	--

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	PHENOLS (UG/L)	SEDI-MENT, SUS-PENDED (MG/L)
01447000 - DELAWARE R AT NORTHAMPTON ST AT EASTON PA (LAT 40 41 30 LONG 075 12 15)										
OCT , 1979										
17...	--	--	--	--	--	--	--	5.0	--	4
MAR , 1980										
26...	--	--	--	--	--	--	--	4.6	--	21
JUN										
03...	100	25	20	<.1	6	0	20	4.5	3	3
JUL										
15...	--	--	--	--	--	--	--	2.6	--	4
AUG										
19...	--	--	--	--	--	--	--	.9	--	4
SEP										
30...	--	--	--	--	--	--	--	7.4	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	ACIDITY (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
01447300 - CHOKE CREEK NR THORNHURST, PA. (LAT 41 09 40 LONG 075 36 10)											
JUN , 1980											
25...	0950	2.3	19	5.5	17.0	4	2	5.0	.8	.5	.8
JUL											
23...	1030	5.2	17	5.4	19.5	5	4	6.0	1.3	.5	.8
01447700 - TUNKHANNOCK CR NR FERNRIDGE, PA. (LAT 41 03 25 LONG 075 33 15)											
JUN , 1980											
25...	1315	17	24	6.3	21.0	6	4	4.0	1.3	.6	1.8
JUL											
23...	1400	13	23	6.1	20.5	7	1	7.0	1.7	.6	1.4
01447750 - BEAR CR AT BEAR CR NR WHITE HAVEN, PA. (LAT 41 10 42 LONG 075 45 21)											
JUN , 1980											
25...	0750	13	55	5.8	20.0	9	5	5.0	2.1	1.0	4.0
JUL											
23...	0800	12	69	5.8	24.0	12	10	4.0	3.0	1.0	5.1
01449200 - MAHONING CR AT MANTZVILLE, PA. (LAT 40 46 12 LONG 075 52 15)											
JUN , 1980											
25...	1340	1.9	73	7.1	24.0	21	13	6.0	4.4	2.4	3.0
JUL											
29...	1300	1.1	73	7.4	22.5	22	10	6.0	4.6	2.5	3.1

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
01447300 - CHOKE CREEK NR THORNHURST, PA. (LAT 41 09 40 LONG 075 36 10)											
JUN , 1980 25...	28	.2	.3	2	3.8	1.6	.0	.2	10	9	.01
JUL 23...	23	.2	.5	1	4.6	1.2	.1	1.5	20	11	.03
01447700 - TUNKHANNOCK CR NR FERNRIDGE, PA. (LAT 41 03 25 LONG 075 33 15)											
JUN , 1980 25...	39	.3	.3	2	2.0	4.1	.0	.0	21	12	.03
JUL 23...	30	.2	.3	6	2.6	3.8	.1	1.1	58	16	.08
01447750 - BEAR CR AT BEAR CR NR WHITE HAVEN, PA. (LAT 41 10 42 LONG 075 45 21)											
JUN , 1980 25...	47	.6	.4	4	6.1	7.7	.1	.6	34	25	.05
JUL 23...	48	.7	.5	2	5.4	11	.1	1.2	34	29	.05
01449200 - MAHONING CR AT MANTZVILLE, PA. (LAT 40 46 12 LONG 075 52 15)											
JUN , 1980 25...	23	.3	.7	8	6.0	5.3	.0	6.1	55	41	.07
JUL 29...	23	.3	.7	12	4.1	4.3	.1	6.2	48	42	.07

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)	PHOS- PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS PO4)
01447300 - CHOKE CREEK NR THORNHURST, PA. (LAT 41 09 40 LONG 075 36 10)										
JUN , 1980										
25...	.06	.02	.030	.04	.18	.21	.23	.010	.000	.00
JUL										
23...	.28	.01	.020	.03	1.1	1.1	1.1	.020	.000	.00
01447700 - TUNKHANNOCK CR NR FERNRIDGE, PA. (LAT 41 03 25 LONG 075 33 15)										
JUN , 1980										
25...	.96	.21	.020	.03	.21	.23	.44	.010	.000	.00
JUL										
23...	2.10	.09	.000	.00	.53	.53	.62	.010	.000	.00
01447750 - BEAR CR AT BEAR CR NR WHITE HAVEN, PA. (LAT 41 10 42 LONG 075 45 21)										
JUN , 1980										
25...	1.19	.03	.020	.03	.31	.33	.36	.010	.000	.00
JUL										
23...	1.09	.04	.020	.03	.91	.93	.97	.020	.000	.00
01449200 - MAHONING CR AT MANTZVILLE, PA. (LAT 40 46 12 LONG 075 52 15)										
JUN , 1980										
25...	.28	1.8	.070	.09	.19	.26	2.1	.020	.060	.18
JUL										
29...	.14	2.1	.010	.01	.09	.10	2.2	.010	.010	.03

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	BICAR-BONATE (MG/L AS HCO3)	ALKA-LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)
01464560 - DELAWARE R AT FLORENCE NJ (LAT 40 07 34 LONG 074 48 59)												
MAY , 1980												
21...	1240	181	7.4	62	18	15	5.9	10	.6	54	44	3.3
SEP												
04...	1515	230	7.3	78	25	19	7.3	13	.7	65	53	5.2

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)	PHOS-PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS PO4)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)
01464560 - DELAWARE R AT FLORENCE NJ (LAT 40 07 34 LONG 074 48 59)												
MAY , 1980												
21...	26	12	3.2	119	106	.16	1.5	.030	.09	3	40	3
SEP												
04...	28	17	1.2	146	126	.20	1.2	.050	.15	--	30	0

DATE	CADMIUM DIS-SOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COBALT, DIS-SOLVED (UG/L AS CO)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)
01464560 - DELAWARE R AT FLORENCE NJ (LAT 40 07 34 LONG 074 48 59)												
MAY , 1980												
21...	3	<10	30	<3	10	<10	30	100	39000	2	60	<4
SEP												
04...	0	--	--	0	--	0	--	10	--	0	--	2

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
01464560 - DELAWARE R AT FLORENCE NJ (LAT 40 07 34 LONG 074 48 59)												
MAY , 1980												
21...	46	650	.00	<10	1	65	<6.0	21	430	6.2	55	.0
SEP												
04...	22	--	--	0	--	87	.0	2	--	2.8	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

01464560 - DELAWARE R AT FLORENCE NJ (LAT 40 07 34 LONG 074 48 59)

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY , 1980											
21...	.0	4	7.4	10	4.4	.0	.0	.0	.0	.0	.0
SEP											
04...	--	--	--	--	--	--	--	--	--	--	--

01464560 - DELAWARE R AT FLORENCE NJ (LAT 40 07 34 LONG 074 48 59)

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY , 1980											
21...	.0	.0	.0	.0	.0	.0	.0	.0	.00	.0	0
SEP											
04...	--	--	--	--	--	--	--	--	--	--	--

01464560 - DELAWARE R AT FLORENCE NJ (LAT 40 07 34 LONG 074 48 59)

DATE	BENZENE TOTAL (UG/L)	CARBONTETRACHLORIDE TOTAL (UG/L)	CHLORODIBROMOMETHANE TOTAL (UG/L)	CHLOROFORM TOTAL (UG/L)	DICHLOROBROMOMETHANE TOTAL (UG/L)	1,1-DICHLOROETHANE TOTAL (UG/L)	1,2-DICHLOROETHANE TOTAL (UG/L)	1,2-DICHLOROPROPANE TOTAL (UG/L)	TETRACHLOROETHYLENE TOTAL (UG/L)	1,1,1-TRICHLOROETHANE TOTAL (UG/L)	TRICHLOROETHYLENE TOTAL (UG/L)
MAY , 1980											
21...	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
SEP											
04...	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	SODIUM+ POTAS-SIUM DIS-SOLVED (MG/L AS NA)
01464800 - LITTLE NESHAMINY CR AT NESHAMINY PA (LAT 40 13 28 LONG 075 07 53)												
OCT , 1979 17...	1745	280	--	12.0	88	47	22	8.0	15	27	.7	17
JUL , 1980 15...	0805	370	7.2	23.0	130	42	32	11	21	26	.8	--
01464910 - LITTLE NESHAMINY CR TRIB AT WARMINSTER PA (LAT 40 13 44 LONG 075 09 38)												
OCT , 1979 17...	1030	245	7.5	12.0	89	58	23	7.7	14	34	.6	16
01464920 - LITTLE NESHAMINY CR AT HARTSVILLE PA (LAT 40 14 06 LONG 075 05 31)												
OCT , 1979 17...	1645	355	7.0	14.0	100	51	25	9.3	23	43	1.0	26
JUL , 1980 15...	0845	850	7.4	23.0	170	44	45	15	84	49	2.8	--
01464930 - LITTLE NESHAMINY CR TRIB AT TRAYMORE PA (LAT 40 14 00 LONG 075 04 19)												
OCT , 1979 17...	1115	285	7.0	11.0	92	53	24	7.8	13	31	.6	15
JUL , 1980 15...	0915	480	7.4	19.0	170	93	51	9.6	19	19	.6	--
01464940 - LITTLE NESHAMINY CR TRIB AT JACKSONVILLE (LAT 40 14 12 LONG 075 03 34)												
OCT , 1979 17...	1200	280	7.1	12.0	88	64	22	8.1	13	33	.6	15
JUL , 1980 15...	0930	300	7.8	20.0	97	45	25	8.3	13	22	.6	--
01467032 - SOUTHAMPTON CREEK AT DAVISVILLE PA (LAT 40 11 03 LONG 075 03 36)												
OCT , 1979 17...	1345	270	7.1	14.5	88	52	23	7.5	13	24	.6	15
JUL , 1980 15...	1000	340	7.6	20.0	120	42	33	9.2	14	20	.6	--
01467033 - SOUTHAMPTON CR TRIB AT COUNTY LINE RD (LAT 40 10 27 LONG 075 04 36)												
OCT , 1979 17...	1600	320	7.1	14.0	110	54	28	9.0	15	23	.6	17
JUL , 1980 15...	1030	400	7.2	20.0	120	47	36	8.0	22	28	.9	--
01467034 - PENNYPACK CR TRIB AT BONAIR PA (LAT 40 11 13 LONG 075 05 54)												
OCT , 1979 17...	1515	340	7.3	--	130	59	33	11	16	29	.6	18
JUL , 1980 15...	1055	500	8.1	22.0	190	81	45	19	22	20	.7	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3)
01464800 - LITTLE NESHAMINY CR AT NESHAMINY PA (LAT 40 13 28 LONG 075 07 53)												
OCT , 1979 17...	2.1	41	36	19	.2	14	169	151	.23	2.2	.000	9.7
JUL , 1980 15...	3.1	83	41	31	.6	8.4	237	204	.32	1.2	.040	5.1
01464910 - LITTLE NESHAMINY CR TRIB AT WARMINSTER PA (LAT 40 13 44 LONG 075 09 38)												
OCT , 1979 17...	2.0	31	38	18	.1	18	179	161	.24	4.8	.010	21
01464920 - LITTLE NESHAMINY CR AT HARTSVILLE PA (LAT 40 14 06 LONG 075 05 31)												
OCT , 1979 17...	3.1	50	41	27	.2	17	213	205	.29	6.2	.340	27
JUL , 1980 15...	9.9	130	74	89	.4	21	515	470	.70	11	1.100	48
01464930 - LITTLE NESHAMINY CR TRIB AT TRAYMORE PA (LAT 40 14 00 LONG 075 04 19)												
OCT , 1979 17...	2.1	39	39	12	.1	17	169	154	.23	3.5	.010	15
JUL , 1980 15...	4.2	74	88	23	.1	8.5	306	262	.42	3.2	.021	14
01464940 - LITTLE NESHAMINY CR TRIB AT JACKSONVILLE (LAT 40 14 12 LONG 075 03 34)												
OCT , 1979 17...	2.2	24	39	18	.1	18	189	166	.26	7.0	.010	31
JUL , 1980 15...	2.0	52	33	19	.1	14	188	166	.26	4.5	.010	20
01467032 - SOUTHAMPTON CREEK AT DAVISVILLE PA (LAT 40 11 03 LONG 075 03 36)												
OCT , 1979 17...	1.6	36	38	17	.1	19	172	153	.23	2.8	.000	12
JUL , 1980 15...	2.0	78	35	23	.1	12	222	184	.30	1.9	.000	8.4
01467033 - SOUTHAMPTON CR TRIB AT COUNTY LINE RD (LAT 40 10 27 LONG 075 04 36)												
OCT , 1979 17...	2.2	53	42	19	.1	19	201	182	.27	3.6	.000	16
JUL , 1980 15...	2.1	76	29	42	.1	16	238	209	.32	1.9	.000	8.4
01467034 - PENNYPACK CR TRIB AT BONAIR PA (LAT 40 11 13 LONG 075 05 54)												
OCT , 1979 17...	1.8	69	41	23	.1	18	219	198	.30	2.9	.000	13
JUL , 1980 15...	2.4	130	50	37	.2	17	334	283	.45	2.8	.010	12

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITROGEN, NITRITE DISSOLVED (MG/L AS NO2)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHOPHOSPHATE DISSOL. (MG/L AS P)	PHOSPHORUS, ORTHOPHOSPHATE DISSOL. (MG/L AS PO4)	ARSENIC DISSOLVED (UG/L AS AS)
01464800 - LITTLE NESHAMINY CR AT NESHAMINY PA (LAT 40 13 28 LONG 075 07 53)											
OCT , 1979											
17...	.00	2.2	.030	.04	.37	.40	2.6	.090	.050	.15	1
JUL , 1980											
15...	.13	1.2	.100	.13	.36	.46	1.7	.340	.340	1.0	3
01464910 - LITTLE NESHAMINY CR TRIB AT WARMINSTER PA (LAT 40 13 44 LONG 075 09 38)											
OCT , 1979											
17...	.03	4.8	.010	.01	1.2	1.2	6.0	.140	.140	.43	1
01464920 - LITTLE NESHAMINY CR AT HARTSVILLE PA (LAT 40 14 06 LONG 075 05 31)											
OCT , 1979											
17...	1.1	6.5	1.800	2.3	1.0	2.8	9.3	.960	.740	2.3	1
JUL , 1980											
15...	3.6	12	4.300	5.5	.00	3.9	16	6.500	7.000	21	3
01464930 - LITTLE NESHAMINY CR TRIB AT TRAYMORE PA (LAT 40 14 00 LONG 075 04 19)											
OCT , 1979											
17...	.03	3.5	.010	.01	.51	.52	4.0	.060	.050	.15	1
JUL , 1980											
15...	.07	3.2	.090	.12	.16	.25	3.5	.470	.380	1.2	1
01464940 - LITTLE NESHAMINY CR TRIB AT JACKSONVILLE (LAT 40 14 12 LONG 075 03 34)											
OCT , 1979											
17...	.03	7.0	.000	.00	.43	.43	7.4	.060	.020	.08	0
JUL , 1980											
15...	.03	4.5	.040	.05	.10	.14	4.6	.100	.110	.34	1
01467032 - SOUTHAMPTON CREEK AT DAVISVILLE PA (LAT 40 11 03 LONG 075 03 36)											
OCT , 1979											
17...	.00	2.8	.000	.00	.31	.31	3.1	.020	.000	.00	0
JUL , 1980											
15...	.00	1.9	.020	.03	.10	.12	2.0	.030	.050	.15	0
01467033 - SOUTHAMPTON CR TRIB AT COUNTY LINE RD (LAT 40 10 27 LONG 075 04 36)											
OCT , 1979											
17...	.00	3.6	.000	.00	.32	.32	3.9	.040	.010	.03	0
JUL , 1980											
15...	.00	1.9	.020	.03	.07	.09	2.0	.050	.060	.18	1
01467034 - PENNYPACK CR TRIB AT BONAIR PA (LAT 40 11 13 LONG 075 05 [illegible])											
OCT , 1979											
17...	.00	2.9	.010	.01	.27	.28	3.2	.040	.010	.03	1
JUL , 1980											
15...	.03	2.8	.010	.01	.11	.12	2.9	.140	.080	.25	1

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
01464800 - LITTLE NESHAMINY CR AT NESHAMINY PA (LAT 40 13 28 LONG 075 07 53)											
OCT , 1979 17...	1	<10	2	60	0	60	.2	--	--	--	2.9
JUL , 1980 15...	4	20	6	20	1	230	.1	0	4	3.9	--
01464910 - LITTLE NESHAMINY CR TRIB AT WARMINSTER PA (LAT 40 13 44 LONG 075 09 38)											
OCT , 1979 17...	0	<10	2	20	11	20	.3	--	--	--	2.6
01464920 - LITTLE NESHAMINY CR AT HARTSVILLE PA (LAT 40 14 06 LONG 075 05 31)											
OCT , 1979 17...	1	<10	14	80	40	50	.3	--	--	--	5.8
JUL , 1980 15...	5	10	29	90	1	90	.1	0	30	15	--
01464930 - LITTLE NESHAMINY CR TRIB AT TRAYMORE PA (LAT 40 14 00 LONG 075 04 19)											
OCT , 1979 17...	0	<10	2	30	48	30	.2	--	--	--	2.8
JUL , 1980 15...	4	20	4	20	0	90	<.1	0	10	4.6	--
01464940 - LITTLE NESHAMINY CR TRIB AT JACKSONVILLE (LAT 40 14 12 LONG 075 03 34)											
OCT , 1979 17...	0	<10	0	20	50	20	.2	--	--	--	2.5
JUL , 1980 15...	3	20	1[illegible]	20	1	40	<.1	0	4	4.3	--
01467032 - SOUTHAMPTON CREEK AT DAVISVILLE PA (LAT 40 11 03 LONG 075 03 36)											
OCT , 1979 17...	2	<10	0	30	52	70	.2	--	--	--	3.1
JUL , 1980 15...	5	10	2	10	1	10	<.1	0	8	2.2	--
01467033 - SOUTHAMPTON CR TRIB AT COUNTY LINE RD (LAT 40 10 27 LONG 075 04 36)											
OCT , 1979 17...	0	<10	2	10	13	9	.2	--	--	--	2.5
JUL , 1980 15...	6	20	1	10	0	20	<.1	0	20	2.8	--
01467034 - PENNYPACK CR TRIB AT BONAIR PA (LAT 40 11 13 LONG 075 05 54)											
OCT , 1979 17...	0	20	2	30	59	60	.2	--	--	--	2.8
JUL , 1980 15...	6	160	6	10	0	20	<.1	1	10	1.8	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

01467035 - MIDDLE BR PENNYPACK CR TRIB AT WARMINSTER (LAT 40 11 42 LONG 075 06 42)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)
OCT , 1979												
17...	1445	310	7.5	15.0	120	44	31	9.3	13	26	.5	15
JUL , 1980												
15...	1120	360	8.9	23.5	160	26	41	13	11	13	.4	--

01467035 - MIDDLE BR PENNYPACK CR TRIB AT WARMINSTER (LAT 40 11 42 LONG 075 06 42)

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3)
OCT , 1979												
17...	1.9	72	33	15	.1	18	190	177	.26	2.7	.000	12
JUL , 1980												
15...	1.4	130	18	16	.1	17	225	202	.31	1.5	.010	6.6

01467035 - MIDDLE BR PENNYPACK CR TRIB AT WARMINSTER (LAT 40 11 42 LONG 075 06 42)

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)	PHOS- PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS PO4)	ARSENIC DIS- SOLVED (UG/L AS AS)
OCT , 1979											
17...	.00	2.7	.040	.05	.13	.17	2.9	.030	.020	.06	1
JUL , 1980											
15...	.03	1.5	.020	.03	.01	.03	1.5	.040	.050	.15	1

01467035 - MIDDLE BR PENNYPACK CR TRIB AT WARMINSTER (LAT 40 11 42 LONG 075 06 42)

DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
OCT , 1979											
17...	0	<10	1	30	23	30	.2	--	--	--	5.2
JUL , 1980											
15...	4	10	1	10	6	4	<.1	0	9	1.7	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

01467060 - DELAWARE RIVER AT PALMYRA, NJ (LAT 40 01 05 LONG 075 02 16)

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	BICARBONATE (MG/L AS HCO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)
MAY , 1980 20...	1150	168	7.2	56	19	14	5.2	10	.6	45	37	4.5
SEP 04...	1300	274	7.2	80	32	20	7.3	18	.9	59	48	6.0

01467060 - DELAWARE RIVER AT PALMYRA, NJ (LAT 40 01 05 LONG 075 02 16)

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE DISSOL. (MG/L AS P)	PHOSPHORUS, ORTHOPHOSPHATE DISSOL. (MG/L AS PO4)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)
MAY , 1980 20...	24	11	3.9	112	98	.15	1.7	.030	.09	0	40	<1
SEP 04...	37	23	.1	162	145	.22	1.5	.110	.34	--	30	0

01467060 - DELAWARE RIVER AT PALMYRA, NJ (LAT 40 01 05 LONG 075 02 16)

DATE	CADMIUM DISSOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, DISSOLVED (UG/L AS CO)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, DISSOLVED (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, DISSOLVED (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	LITHIUM DISSOLVED (UG/L AS LI)
MAY , 1980 20...	2	<10	30	<3	<10	12	70	81	12000	<10	150	<4
SEP 04...	2	--	--	0	--	0	--	21	--	0	--	2

01467060 - DELAWARE RIVER AT PALMYRA, NJ (LAT 40 01 05 LONG 075 02 16)

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY , 1980 20...	25	580	.02	<10	0	63	<6.0	14	530	5.4	190	.0
SEP 04...	20	--	--	0	--	97	3.0	5	--	3.6	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
01467060 - DELAWARE RIVER AT PALMYRA, NJ (LAT 40 01 05 LONG 075 02 16)											
MAY , 1980											
20...	.0	21	94	210	45	.0	1.2	.1	.0	.0	.0
SEP											
04...	--	--	--	--	--	--	--	--	--	--	--

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
01467060 - DELAWARE RIVER AT PALMYRA, NJ (LAT 40 01 05 LONG 075 02 16)											
MAY , 1980											
20...	.0	.0	.0	.0	.0	.0	.0	.0	510	.0	0
SEP											
04...	--	--	--	--	--	--	--	--	--	--	--

DATE	BENZENE TOTAL (UG/L)	CARBONTETRACHLORIDE TOTAL (UG/L)	CHLORODIBROMOMETHANE TOTAL (UG/L)	CHLOROFORM TOTAL (UG/L)	DICHLOROBROMOMETHANE TOTAL (UG/L)	1,1-DICHLOROETHANE TOTAL (UG/L)	1,2-DICHLOROETHANE TOTAL (UG/L)	1,2-DICHLOROPROPANE TOTAL (UG/L)	TETRACHLOROETHYLENE TOTAL (UG/L)	1,1,1-TRICHLOROETHANE TOTAL (UG/L)	TRICHLOROETHYLENE TOTAL (UG/L)
01467060 - DELAWARE RIVER AT PALMYRA, NJ (LAT 40 01 05 LONG 075 02 16)											
MAY , 1980											
20...	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	5.0
SEP											
04...	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

01475200 - DELAWARE RIVER AT PAULSBORO NJ (LAT 39 50 42 LONG 075 16 10)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	BICAR-BONATE (MG/L AS HCO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)
MAY 22...	1100	254	7.0	68	33	17	6.1	15	.9	43	35	6.1
SEP 03...	1120	749	6.8	130	88	27	16	97	4.1	51	42	13

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)
MAY 22...	39	17	2.5	141	121	.19	.03	.120	.37	2	30	<1
SEP 03...	81	160	.4	454	425	.62	2.4	.000	.00	--	40	<1

DATE	CADMIUM DIS-SOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COBALT, DIS-SOLVED (UG/L AS CO)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)
MAY 22...	<1	<10	30	<3	30	<10	10	64	21000	<10	30	4
SEP 03...	1	--	--	<3	--	<10	--	18	--	<10	--	7

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
MAY 22...	50	710	.0	12	0	83	<6.0	19	74	2.5	62	.0
SEP 03...	120	--	--	<10	--	180	<6.0	<4	--	4.8	--	--

01475200 - DELAWARE R AT PAULSBORO NJ (LAT 39 50 42 LONG 075 16 10)--Continued

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY 22...	.0	5.0	32	23	1.4	.0	.3	.0	.0	.0	.0
SEP 03...	--	--	--	--	--	--	--	--	--	--	--

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY 22...	.0	.0	.0	.0	.0	.0	.0	.0	.00	.0	0
SEP 03...	--	--	--	--	--	--	--	--	--	--	--

DATE	BENZENE TOTAL (UG/L)	CARBON-TETRACHLORIDE TOTAL (UG/L)	CHLORODIBROMOMETHANE TOTAL (UG/L)	CHLOROFORM TOTAL (UG/L)	DICHLOROBROMOMETHANE TOTAL (UG/L)	1,1-DICHLOROETHANE TOTAL (UG/L)	1,2-DICHLOROETHANE TOTAL (UG/L)	1,2-DICHLOROPROPANE TOTAL (UG/L)	TETRACHLOROETHYLENE TOTAL (UG/L)	1,1,1-TRICHLOROETHANE TOTAL (UG/L)	TRICHLOROTHYLENE TOTAL (UG/L)
MAY 22...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
SEP 03...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

ANALYSES OF SAMPLES COLLECTED AT SCHUYLKILL RIVER QUALITY ASSESSMENT SITES

WATER-QUALITY SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
01470759 - MAIDEN CREEK AT WILEYS BRIDGE NEAR TEMPLE, PA (LAT 40 26 21 LONG 075 55 37)								
MAR , 1980								
21...	1605	--	180	7.8	9.4	0	0	0
25...	0015	--	154	7.3	--	0	0	0
APR								
04...	1900	--	189	7.3	9.0	0	0	0
28...	1625	--	201	8.0	--	0	0	0
29...	1335	--	189	8.4	--	0	0	0
MAY								
27...	1135	--	222	7.8	--	0	0	0
JUN								
26...	0700	--	276	7.7	19.0	0	0	0
1471519 - WYOMISSING CRK AT MUSEUM RD., WEST READING, PA (LAT 40 19 37 LONG 075 56 58)								
MAR , 1980								
21...	1425	--	188	7.4	11.0	0	0	0
25...	0240	--	262	7.6	--	0	0	0
MAY								
29...	1000	--	368	8.1	--	0	0	0
JUN								
26...	1050	--	416	7.9	--	0	0	0
01471540 - ANGELICA CREEK AT READING, PA (LAT 40 18 36 LONG 075 55 22)								
MAR , 1980								
21...	1337	--	224	7.7	--	0	0	0
25...	1715	--	204	7.5	11.0	0	0	0

ANALYSES OF SAMPLES COLLECTED AT SCHUYLKILL RIVER QUALITY ASSESSMENT SITES

WATER-QUALITY SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, TOTAL RECOVERABLE (UG/L, AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)
01470759 - MAIDEN CREEK AT WILEYS BRIDGE NEAR TEMPLE, PA (LAT 40 26 21 LONG 075 55 37)									
MAR , 1980									
21...	5	4	1	18	10	8	5	4	1
25...	6	5	1	7	3	4	7	7	0
APR									
04...	4	2	2	10	1	9	2	1	1
28...	7	6	1	3	0	3	2	2	0
29...	7	6	1	4	1	3	0	0	1
MAY									
27...	7	6	1	6	4	2	4	4	0
JUN									
26...	7	7	0	5	1	4	6	6	0
01471519 - WYOMISSING CRK AT MUSEUM RD., WEST READING, PA (LAT 40 19 37 LONG 075 56 58)									
MAR , 1980									
21...	17	16	1	95	95	0	170	170	0
25...	7	6	1	10	5	5	18	18	0
MAY									
29...	9	8	1	4	2	2	2	2	0
JUN									
26...	9	8	1	5	3	2	7	7	0
01471540 - ANGELICA CREEK AT READING, PA (LAT 40 18 36 LONG 075 55 22)									
MAR , 1980									
21...	5	4	1	67	58	9	27	27	0
25...	5	4	1	4	0	4	4	3	1

ANALYSES OF SAMPLES COLLECTED AT SCHUYLKILL RIVER QUALITY ASSESSMENT SITES

WATER-QUALITY SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, SUS- PENDED RECOV- ERABLE (UG/L AS NI)	NICKEL, DIS- SOLVED (UG/L AS NI)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDED RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
01470759 - MAIDEN CREEK AT WILEYS BRIDGE NEAR TEMPLE, PA (LAT 40 26 21 LONG 075 55 37)								
MAR , 1980								
21...	3	2	1	20	0	30	--	--
25...	3	3	0	10	0	20	--	--
APR								
04...	3	0	3	10	0	10	--	--
28...	1	1	0	10	0	10	--	--
29...	1	0	1	10	10	0	--	--
MAY								
27...	3	3	0	10	0	20	--	--
JUN								
26...	0	0	0	10	0	10	--	--
01471519 - WYOMISSING CRK AT MUSEUM RD., WEST READING, PA (LAT 40 19 37 LONG 075 56 58)								
MAR , 1980								
21...	21	21	0	160	130	30	--	--
25...	4	4	0	20	0	20	--	--
MAY								
29...	2	2	0	10	0	10	--	--
JUN								
26...	0	0	0	30	20	10	--	--
01471540 - ANGELICA CREEK AT READING, PA (LAT 40 18 36 LONG 075 55 22)								
MAR , 1980								
21...	4	4	0	20	0	20	--	--
25...	3	2	1	20	10	10	--	--

WATER-QUALITY SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
01470759 - MAIDEN CREEK AT WILEYS BRIDGE NEAR TEMPLE, PA (LAT 40 26 21 LONG 075 55 37)										
OCT , 1979										
01...	1625	--	170	8.7	18.5	1	2	0	8	9
MAR , 1980										
21...	1605	--	180	7.8	9.4	0	5	--	18	5
25...	0015	--	154	7.3	--	0	6	--	7	7
APR										
04...	1900	--	189	7.3	9.0	0	4	--	10	2
28...	1625	--	201	8.0	--	0	7	--	3	2
29...	1335	--	189	8.4	--	0	7	--	4	0
MAY										
27...	1135	--	222	7.8	--	0	7	--	6	4
JUN										
26...	0700	--	276	7.7	19.0	0	7	--	5	6
01471519 - WYOMISSING CRK AT MUSEUM RD., WEST READING, PA (LAT 40 19 37 LONG 075 56 58)										
OCT , 1979										
01...	1234	--	105	7.0	16.5	0	6	13	58	100
01...	1258	--	115	7.0	16.5	0	14	12	57	180
01...	1411	--	145	7.0	16.5	0	6	7	33	60
03...	1720	--	180	6.5	18.0	0	2	12	6	5
MAR , 1980										
21...	1425	--	188	7.4	11.0	0	17	--	95	170
25...	0240	--	262	7.6	--	0	7	--	10	18
MAY										
29...	1000	--	368	8.1	--	0	9	--	4	2
JUN										
26...	1050	--	416	7.9	--	0	9	--	5	7
01471540 - ANGELICA CREEK AT READING, PA (LAT 40 18 36 LONG 075 55 22)										
OCT , 1979										
01...	1335	--	160	7.0	17.0	1	2	2	15	23
MAR , 1980										
21...	1337	--	224	7.7	--	0	5	--	67	27
25...	1715	--	204	7.5	11.0	0	5	--	4	4

ANALYSES OF SAMPLES COLLECTED AT SCHUYLKILL RIVER QUALITY ASSESSMENT SITES

WATER-QUALITY SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	PCB TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)
01470759 - MAIDEN CREEK AT WILEYS BRIDGE NEAR TEMPLE, PA (LAT 40 26 21 LONG 075 55 37)										
OCT , 1979										
01...	2	80	.00	.0	.00	.0	.00	.00	.00	.00
MAR , 1980										
21...	3	20	--	--	--	--	--	--	--	--
25...	3	10	--	--	--	--	--	--	--	--
APR										
04...	3	10	--	--	--	--	--	--	--	--
28...	1	10	--	--	--	--	--	--	--	--
29...	1	10	--	--	--	--	--	--	--	--
MAY										
27...	3	10	--	--	--	--	--	--	--	--
JUN										
26...	0	10	--	--	--	--	--	--	--	--
01471519 - WYOMISSING CRK AT MUSEUM RD., WEST READING, PA (LAT 40 19 37 LONG 075 56 58)										
OCT , 1979										
01...	23	180	.10	.0	.00	.0	.00	.00	.00	.00
01...	21	170	.10	.0	.00	.0	.00	.00	.00	.00
01...	8	80	.00	.0	.00	.0	.00	.00	.00	.00
03...	12	40	.00	.0	.00	.0	.00	.00	.00	.00
MAR , 1980										
21...	21	160	--	--	--	--	--	--	--	--
25...	4	20	--	--	--	--	--	--	--	--
MAY										
29...	2	10	--	--	--	--	--	--	--	--
JUN										
26...	0	30	--	--	--	--	--	--	--	--
01471540 - ANGELICA CREEK AT READING, PA (LAT 40 18 36 LONG 075 55 22)										
OCT , 1979										
01...	3	20	.00	.0	.00	.0	.00	.00	.00	.00
MAR , 1980										
21...	4	20	--	--	--	--	--	--	--	--
25...	3	20	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT SCHUYLKILL RIVER QUALITY ASSESSMENT SITES

WATER-QUALITY SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)
01470759 - MAIDEN CREEK AT WILEYS BRIDGE NEAR TEMPLE, PA (LAT 40 26 21 LONG 075 55 37)									
OCT , 1979									
01...	.00	.00	.00	.00	.00	.00	.00	.00	0
MAR , 1980									
21...	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--
APR									
04...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--
MAY									
27...	--	--	--	--	--	--	--	--	--
JUN									
26...	--	--	--	--	--	--	--	--	--
01471519 - WYOMISSING CRK AT MUSEUM RD., WEST READING, PA (LAT 40 19 37 LONG 075 56 58)									
OCT , 1979									
01...	.00	.00	.00	.00	.00	.00	.00	--	0
01...	.00	.00	.00	.00	.00	.00	.00	.00	0
01...	.00	.00	.00	.00	.00	.00	.00	.00	0
03...	.00	.00	.00	.00	.00	.00	.00	.00	0
MAR , 1980									
21...	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--
MAY									
29...	--	--	--	--	--	--	--	--	--
JUN									
26...	--	--	--	--	--	--	--	--	--
01471540 - ANGELICA CREEK AT READING, PA (LAT 40 18 36 LONG 075 55 22)									
OCT , 1979									
01...	.00	.00	.00	.00	.00	.00	.00	.00	0
MAR , 1980									
21...	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT SCHUYLKILL RIVER QUALITY ASSESSMENT SITES

WATER-QUALITY SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO
01471780 - SCHUYLKILL RIVER AT STOWE NR POTTSTOWN, PA (LAT 40 13 10 LONG 075 41 28)											
FEB , 1980											
20...	1020	495	6.6	5.0	180	120	46	17	27	24	.9

DATE	SODIUM+ POTAS-SIUM DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
01471780 - SCHUYLKILL RIVER AT STOWE NR POTTSTOWN, PA (LAT 40 13 10 LONG 075 41 28)											
FEB , 1980											
20...	30	2.8	66	110	35	.3	6.8	321	297	.44	2.9

WATER-QUALITY SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
01472105 - SCHUYLKILL RIVER AT ROYERSFORD, PA (LAT 40 10 57 LONG 075 32 44)								
MAR , 1980								
21...	1345	--	223	7.2	12.0	--	--	--
29...	0645	--	260	7.4	8.0	--	--	--
29...	1430	--	255	7.4	8.5	--	--	--
29...	1807	--	247	7.4	8.3	--	--	--
30...	0600	--	247	7.3	8.0	--	--	--
30...	1220	--	246	7.3	9.5	--	--	--
MAY								
12...	2030	--	302	7.2	17.8	--	--	--
13...	0720	--	265	7.6	16.5	--	--	--
13...	1250	--	259	7.6	19.0	--	--	--
13...	1940	--	282	8.1	19.5	--	--	--
14...	0130	--	287	7.6	18.0	--	--	--
14...	0820	--	313	7.0	17.5	--	--	--
14...	2120	--	277	7.8	18.3	--	--	--
01472161 - FRENCH CREEK AT PHOENIXVILLE, PA. (LAT 40 08 07 LONG 075 31 05) a/								
MAR , 1980								
21...	1425	--	116	7.2	12.0	1	1	0
21...	1700	--	98	6.9	9.0	1	1	0
21...	1900	--	97	6.8	8.0	0	0	0
24...	1955	--	141	7.2	7.0	0	0	0
25...	1240	--	123	7.3	7.5	0	0	0
31...	1120	--	127	7.4	7.5	0	0	0
31...	1505	--	121	7.3	7.5	0	0	0
31...	1755	--	114	7.3	6.5	0	0	0
APR								
01...	1815	--	131	7.2	8.0	0	0	0
MAY								
25...	0245	--	145	7.3	20.0	0	0	0
JUN								
25...	1945	--	157	8.0	26.0	0	0	0
01473170 - VALLEY CRK AT WILSON ROAD NEAR VALLEY FORGE, PA (LAT 40 04 53 LONG 075 27 25)								
MAR , 1980								
21...	1010	84	323	7.8	12.0	0	0	0
21...	1020	99	401	7.8	12.0	0	0	0
25...	0635	89	428	8.0	8.0	0	0	0
31...	1350	290	277	8.2	8.0	0	0	0
MAY								
08...	1910	48	492	8.4	30.0	0	0	0
JUN								
26...	0055	20	534	8.1	19.0	0	0	0

a/Additional data for this site are published in the section, Analyses of samples collected at water-quality partial-record stations.

ANALYSES OF SAMPLES COLLECTED AT SCHUYLKILL RIVER QUALITY ASSESSMENT SITES

WATER-QUALITY SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)
01472105 - SCHUYLKILL RIVER AT ROYERSFORD, PA (LAT 40 10 57 LONG 075 32 44)									
MAR , 1980									
21...	--	--	--	20	12	8	27	27	0
29...	--	--	--	19	15	4	10	10	0
29...	--	--	--	11	7	4	9	7	2
29...	--	--	--	14	8	6	19	18	1
30...	--	--	--	12	9	3	6	6	0
30...	--	--	--	14	11	3	7	7	0
MAY									
12...	--	--	--	8	0	8	6	6	0
13...	--	--	--	30	23	7	39	38	1
13...	--	--	--	25	19	6	29	28	1
13...	--	--	--	21	14	7	20	20	0
14...	--	--	--	23	15	8	23	23	0
14...	--	--	--	15	9	6	20	20	0
14...	--	--	--	9	3	6	6	6	0
01472161 - FRENCH CREEK AT PHOENIXVILLE, PA. (LAT 40 08 07 LONG 075 31 05)									
MAR , 1980									
21...	28	11	17	45	37	8	77	76	1
21...	36	19	17	54	43	11	130	130	1
21...	50	34	16	44	36	8	110	110	1
24...	6	5	1	11	7	4	22	21	1
25...	4	3	1	13	9	4	13	13	0
31...	10	9	1	17	12	5	42	42	0
31...	12	11	1	17	10	7	35	32	3
31...	9	8	1	21	15	6	29	27	2
APR									
01...	7	6	1	4	0	5	5	5	0
MAY									
25...	8	6	2	6	2	4	2	2	0
JUN									
25...	6	6	0	9	4	5	6	6	0
01473170 - VALLEY CRK AT WILSON ROAD NEAR VALLEY FORGE, PA (LAT 40 04 53 LONG 075 27 25)									
MAR , 1980									
21...	17	15	2	29	23	6	48	47	1
21...	15	13	2	16	11	5	50	49	1
25...	9	6	3	12	7	5	19	19	0
31...	24	22	2	25	20	5	55	55	0
MAY									
08...	6	5	1	3	0	3	1	1	0
JUN									
26...	11	11	0	5	4	1	7	7	0

DATE	TIME	PCB TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)
01473170 - VALLEY CRK AT WILSON ROAD NEAR VALLEY FORGE, PA (LAT 40 04 53 LONG 075 27 25)									
MAR , 1980									
31...	1350	.70	.0	.00	.0	.00	.00	.00	.00

ANALYSES OF SAMPLES COLLECTED AT SCHUYLKILL RIVER QUALITY ASSESSMENT SITES

WATER-QUALITY SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
01472105 - SCHUYLKILL RIVER AT ROYERSFORD, PA (LAT 40 10 57 LONG 075 33 44)								
MAR , 1980								
21...	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	2.5	--
29...	--	--	--	--	--	--	4.4	--
29...	--	--	--	--	--	--	3.6	--
30...	--	--	--	--	--	--	3.0	--
30...	--	--	--	--	--	--	2.9	--
MAY								
12...	--	--	--	--	--	--	--	3.5
13...	--	--	--	--	--	--	9.4	2.4
13...	--	--	--	--	--	--	7.1	2.8
13...	--	--	--	--	--	--	4.2	2.5
14...	--	--	--	--	--	--	3.6	2.6
14...	--	--	--	--	--	--	3.2	2.9
14...	--	--	--	--	--	--	4.0	2.3
01472161 - FRENCH CREEK AT PHOENIXVILLE, PA. (LAT 40 08 07 LONG 075 31 05)								
MAR , 1980								
21...	21	20	1	160	150	10	--	--
21...	25	25	0	180	170	10	--	--
21...	23	23	0	190	180	10	--	--
24...	6	5	1	30	10	20	--	--
25...	3	3	0	20	0	20	--	--
31...	6	4	2	60	50	10	--	--
31...	5	3	2	60	50	10	--	--
31...	4	3	1	50	40	10	--	--
APR								
01...	4	3	1	10	0	10	--	--
MAY								
25...	2	2	0	0	0	0	--	--
JUN								
25...	0	0	2	10	0	10	--	--
01473170 - VALLEY CRK AT WILSON ROAD NEAR VALLEY FORGE, PA (LAT 40 04 53 LONG 075 27 25)								
MAR , 1980								
21...	32	32	0	170	0	280	--	--
21...	23	21	2	110	0	220	--	--
25...	5	4	1	20	10	10	--	--
31...	24	24	0	120	110	10	--	--
MAY								
08...	2	3	0	30	30	0	--	--
JUN								
26...	1	1	0	20	10	10	--	--

DATE	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)
01473170 - VALLEY CRK AT WILSON ROAD NEAR VALLEY FORGE, PA (LAT 40 04 53 LONG 075 27 25)									
MAR , 1980									
31...	.00	.00	.00	.00	.00	.00	.00	.00	0

ANALYSES OF SAMPLES COLLECTED AT SCHUYLKILL RIVER QUALITY ASSESSMENT SITES

WATER-QUALITY SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

01473193 - SCHUYLKILL RIVER AT PORT KENNEDY, PA (LAT 40 06 27 LONG 075 25 16)

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM SUSPENDED RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)
DEC , 1979								
27...	1516	--	435	7.4	6.0	0	0	0
MAR , 1980								
18...	1200	--	148	6.9	6.5	0	0	0
21...	2000	--	179	7.1	7.0	1	1	0
25...	1152	--	200	7.5	7.0	0	0	0
25...	1600	--	212	7.2	7.0	0	0	0
29...	0830	--	245	7.4	8.5	--	--	--
29...	1615	--	244	7.4	8.5	2	2	0
29...	2015	--	234	7.4	8.9	1	0	1
30...	0725	--	226	7.2	8.5	--	--	--
30...	1350	--	223	7.3	10.0	--	--	--
APR								
01...	1315	--	194	7.3	8.0	0	0	0
MAY								
08...	1959	--	272	7.5	18.0	0	0	0
12...	2140	--	291	7.8	18.3	0	0	0
13...	0855	--	274	7.4	17.5	1	1	0
13...	1400	--	221	7.3	19.0	--	--	--
13...	2055	--	227	7.5	18.5	--	--	--
14...	0255	--	249	7.5	18.0	--	--	--
14...	1005	--	276	7.0	18.0	--	--	--
14...	2230	--	287	7.7	18.3	--	--	--
25...	0405	--	317	7.6	22.8	0	0	0
JUN								
25...	2300	--	416	8.7	26.0	0	0	0

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)
DEC , 1979									
27...	30	10	20	9	4	5	7	7	0
MAR , 1980									
18...	20	--	--	22	17	5	17	17	0
21...	30	29	1	45	39	6	68	68	0
25...	10	9	1	17	11	6	16	16	0
25...	5	4	1	16	8	8	12	12	0
29...	--	--	--	20	16	4	13	11	2
29...	8	6	2	24	19	5	13	10	3
29...	9	7	2	14	9	5	11	10	1
30...	--	--	--	10	4	6	9	8	1
30...	--	--	--	11	6	5	7	7	0
APR									
01...	10	9	1	11	7	4	56	52	4
MAY									
08...	12	10	2	7	2	5	5	5	0
12...	3	0	3	14	9	5	6	6	0
13...	14	12	2	34	27	7	44	43	1
13...	--	--	--	52	45	7	45	45	0
13...	--	--	--	20	12	8	20	20	0
14...	--	--	--	12	5	7	12	12	0
14...	--	--	--	10	4	6	12	11	1
14...	--	--	--	13	6	7	8	8	0
25...	10	9	1	13	8	5	5	5	0
JUN									
25...	9	9	0	8	1	7	9	8	0

ANALYSES OF SAMPLES COLLECTED AT SCHUYLKILL RIVER QUALITY ASSESSMENT SITES

WATER-QUALITY SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

01473193 - SCHUYLKILL RIVER AT PORT KENNEDY, PA (LAT 40 06 27 LONG 075 25 16)

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
DEC , 1979								
27...	7	1	8	40	30	10	--	--
MAR , 1980								
18...	21	18	3	80	70	10	2.4	3.9
21...	32	29	3	130	120	10	--	--
25...	9	5	4	40	30	10	--	--
25...	9	3	8	40	20	20	--	--
29...	--	--	--	--	--	--	2.4	--
29...	7	1	6	70	60	10	--	--
29...	9	5	4	40	30	10	4.1	--
30...	--	--	--	--	--	--	4.8	--
30...	--	--	--	--	--	--	3.2	--
APR								
01...	11	7	4	130	80	50	--	--
MAY								
08...	8	4	2	30	20	10	2.8	1.8
12...	3	0	3	20	10	10	--	5.2
13...	48	46	2	150	130	20	7.2	2.4
13...	--	--	--	--	--	--	8.1	4.1
13...	--	--	--	--	--	--	6.3	8.0
14...	--	--	--	--	--	--	--	17
14...	--	--	--	--	--	--	--	3.0
14...	--	--	--	--	--	--	--	9.4
25...	9	7	2	30	10	10	2.8	2.4
JUN								
25...	4	2	2	20	10	10	--	5.2

DATE	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)
DEC , 1979									
27...	.00	.00	.00	.00	.00	.00	.00	.00	0
MAR , 1980									
18...	.00	.00	.00	.00	.00	.00	.00	.00	0
21...	.00	.00	.00	.00	.00	.00	.00	--	0
25...	.00	.00	.00	.00	.00	.00	.00	.00	0
29...	.00	.00	.00	.00	.00	.00	.00	.00	0
29...	.00	.00	.00	.00	.00	.00	.00	.00	0
APR									
01...	.00	.00	.00	.00	.00	.00	.00	.00	0
MAY									
08...	.00	.00	.00	.00	.00	.00	.00	.00	0
12...	.00	.00	.00	.00	.00	.00	.00	.00	0
13...	.00	.00	.00	.00	.00	.00	.00	.00	0
14...	.00	.00	.00	.00	.00	.00	.00	.00	0

DATE	TIME	PCB TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)
DEC , 1979									
27...	1516	.10	.0	.00	.0	.00	.00	.00	.00
MAR , 1980									
18...	1200	.10	.0	.00	.0	.00	.00	.00	.00
21...	2000	.10	.0	.00	.1	.00	.00	.00	.00
25...	1152	.10	.0	.00	.0	.00	.00	.00	.00
29...	1615	.30	.0	.00	.0	.00	.00	.00	.00
29...	2015	.00	.0	.00	.0	.00	.00	.00	.00
APR									
01...	1315	.10	.0	.00	.0	.00	.00	.00	.00
MAY									
08...	1959	.10	.0	.00	.0	.00	.00	.00	.00
12...	2140	.10	.0	.00	.0	.00	.00	.00	.00
13...	0855	.30	.0	.00	.0	.00	.00	.00	.00
14...	1005	.10	.0	.00	.0	.00	.00	.00	.00

ANALYSES OF SAMPLES COLLECTED AT SCHUYLKILL RIVER QUALITY ASSESSMENT SITES

WATER-QUALITY SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
01473470 - STONY CREEK AT STERIGER STREET AT NORRISTOWN (LAT 40 07 38 LONG 075 20 43)								
MAR , 1980								
21...	1215	--	166	6.9	11.0	0	0	0
21...	1600	--	138	6.9	11.5	0	0	0
25...	0722	--	189	7.3	6.5	0	0	0
29...	1012	--	246	7.5	8.0	0	0	0
APR								
04...	1105	--	217	7.5	--	0	0	0
MAY								
08...	2047	--	314	7.5	16.0	0	0	0
JUN								
25...	2200	--	424	7.8	24.5	0	0	0

DATE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)
MAR , 1980									
21...	24	22	2	53	47	6	200	200	0
21...	25	23	2	27	17	10	65	65	0
25...	7	6	1	7	1	6	10	10	0
29...	7	5	2	12	1	11	9	6	3
APR									
04...	5	1	4	5	0	10	1	0	10
MAY									
08...	9	7	2	5	0	5	2	2	0
JUN									
25...	11	11	0	4	1	3	7	7	0

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
MAR , 1980								
21...	28	27	1	240	230	10	--	--
21...	21	20	1	130	120	10	--	--
25...	5	4	1	20	0	30	--	--
29...	--	--	3	20	0	20	--	--
APR								
04...	2	0	2	10	0	30	--	--
MAY								
08...	2	2	0	30	20	10	--	--
JUN								
25...	0	0	1	10	0	10	--	--

WATER-QUALITY SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

01473695 - PLYMOUTH CREEK NEAR CONSHOHOCKEN, PA (LAT 40 05 31 LONG 075 18 42)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
OCT , 1979										
10...	1030	69	175	7.5	8.5	0	4	--	16	25

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PCB TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)
OCT , 1979										
10...	10	30	.00	.0	.00	.0	.00	.00	.01	.00

DATE	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)
OCT , 1979									
10...	.00	.00	.00	.00	.00	.00	.00	.00	0

ANALYSES OF SAMPLES COLLECTED AT SCHUYLKILL RIVER QUALITY ASSESSMENT SITES

BED MATERIAL SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ANTI-MONY, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BERYL-LIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)
402944075582000 - SCHUYLKILL R AT SHOEMAKERSVILLE PA (LAT 40 29 44 LONG 075 58 20)										
NOV , 1979 13...	1135	1	0	7	<10	30	110	420	.00	140
402821075582100 - SCHUYLKILL R AT MOHRSVILLE PA (LAT 40 28 21 LONG 075 58 21)										
NOV , 1979 13...	1400	0	3	7	<10	20	150	290	.00	70
01470560 - SCHUYLKILL RIVER AT LEESPORT, PA (LAT 40 26 43 LONG 075 58 08)										
NOV , 1979 13...	1530	0	0	5	<10	20	70	190	.00	70
01470764 - MAIDEN CREEK NEAR LEESPORT, PA (LAT 40 25 28 LONG 075 56 40)										
NOV , 1979 13...	1650	0	0	4	<10	20	90	210	.00	<10
402453075562500 - SCHUYLKILL R AT ONTELAUNEE NR TEMPLE PA (LAT 40 24 53 LONG 075 56 25)										
DEC , 1979 05...	1230	1	0	10	<10	30	200	310	.00	140
402443075580900 - SCHUYLKILL R AT STOUDTS FERRY NR READING PA (LAT 40 24 43 LONG 075 58 09)										
NOV , 1979 14...	0845	0	0	6	<10	140	270	250	.00	190
01470767 - SCHUYLKILL R AT FELIX DAM NEAR READING, PA. (LAT 40 23 36 LONG 075 58 23)										
NOV , 1979 14...	0945	1	0	7	<10	30	130	200	.00	70
402240075571200 - SCHUYLKILL RIVER AT MUHLENBERG PA (LAT 40 22 40 LONG 075 57 12)										
DEC , 1979 05...	1030	1	0	15	30	120	240	260	.00	150
01470771 - BERNHART RUN AT READING, PA. (LAT 40 22 18 LONG 075 55 12)										
DEC , 1979 06...	1530	46	0	6	20	80	190	19000	.00	90
01470772 - SCHUYLKILL R ABOVE TULPEHOCKEN CR AT READING, PA (LAT 40 20 52 LONG 075 57 00)										
DEC , 1979 05...	1400	0	3	8	<10	880	300	400	.00	930

ANALYSES OF SAMPLES COLLECTED AT SCHUYLKILL RIVER QUALITY ASSESSMENT SITES

BED MATERIAL SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	SILVER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS AG)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
402944075582000 - SCHUYLKILL R AT SHOEMAKERSVILLE PA (LAT 40 29 44 LONG 075 58 20)										
NOV , 1979 13...	2	0	540	59	.8	60	73	.0	7	1.1
402821075582100 - SCHUYLKILL R AT MOHRSVILLE PA (LAT 40 28 21 LONG 075 58 21)										
NOV , 1979 13...	2	<1	590	70	.2	70	22	.0	6	1.0
01470560 - SCHUYLKILL RIVER AT LEESPORT, PA (LAT 40 26 43 LONG 075 58 08)										
NOV , 1979 13...	1	0	450	71	17	88	43	.0	6	1.6
01470764 - MAIDEN CREEK NEAR LEESPORT, PA (LAT 40 25 28 LONG 075 56 40)										
NOV , 1979 13...	0	0	120	--	--	49	6	.0	0	.9
402453075562500 - SCHUYLKILL R AT ONTELAUNEE NR TEMPLE PA (LAT 40 24 53 LONG 075 56 25)										
DEC , 1979 05...	1	<1	850	50	1.7	52	83	.0	5	4.4
402443075580900 - SCHUYLKILL R AT STOUDTS FERRY NR READING PA (LAT 40 24 43 LONG 075 58 09)										
NOV , 1979 14...	1	1	600	51	1.9	53	230	.0	0	1.4
01470767 - SCHUYLKILL R AT FELIX DAM NEAR READING, PA. (LAT 40 23 36 LONG 075 58 23)										
NOV , 1979 14...	1	0	670	58	1.6	60	240	.0	0	1.5
402240075571200 - SCHUYLKILL RIVER AT MUHLENBERG PA (LAT 40 22 40 LONG 075 57 12)										
DEC , 1979 05...	2	<1	710	72	.5	72	170	.0	0	5.0
01470771 - BERNHART RUN AT READING, PA. (LAT 40 22 18 LONG 075 55 12)										
DEC , 1979 06...	1	<1	610	47	7.0	54	90	.0	11	1.0
01470772 - SCHUYLKILL R ABOVE TULPEHOCKEN CR AT READING, PA (LAT 40 20 52 LONG 075 57 00)										
DEC , 1979 05...	1	<1	750	57	3.5	60	320	.0	43	10

ANALYSES OF SAMPLES COLLECTED AT SCHUYLKILL RIVER QUALITY ASSESSMENT SITES

BED MATERIAL SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
402944075582000 - SCHUYLKILL R AT SHOEMAKERSVILLE PA (LAT 40 29 44 LONG 075 58 20)									
NOV , 1979									
13...	3.0	2.8	.9	.0	.0	.0	.0	.0	0
402821075582100 - SCHUYLKILL R AT MOHRSVILLE PA (LAT 40 28 21 LONG 075 58 21)									
NOV , 1979									
13...	2.5	.8	.6	.0	.0	.0	.0	.0	0
01470560 - SCHUYLKILL RIVER AT LEESPORT, PA (LAT 40 26 43 LONG 075 58 08)									
NOV , 1979									
13...	1.6	.4	.8	.0	.0	.0	.0	.0	0
01470764 - MAIDEN CREEK NEAR LEESPORT, PA (LAT 40 25 28 LONG 075 56 40)									
NOV , 1979									
13...	1.9	12	.0	.0	.0	.0	.0	.0	0
402453075562500 - SCHUYLKILL R AT ONTELAUNEE NR TEMPLE PA (LAT 40 24 53 LONG 075 56 25)									
DEC , 1979									
05...	4.7	1.0	.4	.0	.0	.0	.0	.0	0
402443075580900 - SCHUYLKILL R AT STOUDTS FERRY NR READING PA (LAT 40 24 43 LONG 075 58 09)									
NOV , 1979									
14...	8.6	3.6	1.0	.6	.0	.0	.0	.0	0
01470767 - SCHUYLKILL R AT FELIX DAM NEAR READING, PA. (LAT 40 23 38 LONG 075 58 23)									
NOV , 1979									
14...	3.4	5.0	.0	.0	.0	.0	.0	.0	0
402240075571200 - SCHUYLKILL RIVER AT MUHLENBERG PA (LAT 40 22 40 LONG 075 57 12)									
DEC , 1979									
05...	5.5	2.9	1.8	.0	.0	.0	.0	.0	0
01470771 - BERNHART RUN AT READING, PA. (LAT 40 22 18 LONG 075 55 12)									
DEC , 1979									
06...	1.2	1.3	.7	.0	.0	.0	.0	.0	0
01470772 - SCHUYLKILL R ABOVE TULPEHOCKEN CR AT READING, PA (LAT 40 20 52 LONG 075 57 00)									
DEC , 1979									
05...	7.5	23	.0	.0	.0	.0	.0	.0	0

ANALYSES OF SAMPLES COLLECTED AT SCHUYLKILL RIVER QUALITY ASSESSMENT SITES

BED MATERIAL SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ANTIMONY, TOTAL IN BOTTOM MATERIAL (UG/G)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)
01470982 - CACOOSING CREEK NEAR READING, PA. (LAT 40 21 58 LONG 075 59 41)										
DEC , 1979 07...	1400	1	0	6	<10	30	70	110	.00	30
401822075583700 - WYOMISSING CR AT SHILLINGTON (LAT 40 18 22 LONG 075 58 37)										
DEC , 1979 07...	1215	0	1	5	<10	20	30	210	.04	30
01471519 - WYOMISSING CRK AT MUSEUM RD., WEST READING, PA (LAT 40 19 37 LONG 075 56 58)										
DEC , 1979 06...	1700	1	0	3	<10	10	40	210	.03	20
401925075553000 - SCHUYLKILL R AT SOUTH ST READING PA (LAT 40 19 25 LONG 075 55 30)										
DEC , 1979 06...	1300	1	0	50	<10	90	3000	800	.00	170
401727075564900 - ANGELICA CR NR SHILLINGTON (LAT 40 17 27 LONG 075 56 49)										
DEC , 1979 07...	1100	0	0	6	<10	20	40	90	.00	30
01471540 - ANGELICA CREEK AT READING, PA (LAT 40 18 36 LONG 075 55 22)										
DEC , 1979 07...	1015	0	0	4	<10	40	70	190	.05	40
01471570 - SCHUYLKILL R AT RIDGEWOOD NEAR READING, PA. (LAT 40 18 08 LONG 075 54 21)										
DEC , 1979 06...	1200	1	4	17	10	190	840	560	.08	170
401737075531400 - SCHUYLKILL R AT SEYFERT NR GIBRALTAR PA (LAT 40 17 37 LONG 075 53 14)										
NOV , 1979 15...	0800	1	4	4	<10	130	290	260	.00	120
01471620 - ALLEGHENY CREEK AT GIBRALTAR, PA (LAT 40 17 06 LONG 075 52 24)										
DEC , 1979 07...	0800	0	0	6	<10	10	30	60	.00	30
01471625 - SCHUYLKILL R NEAR LORANE, PA. (LAT 40 17 20 LONG 075 52 05)										
NOV , 1979 15...	1400	1	2	0	10	120	250	220	.00	70

ANALYSES OF SAMPLES COLLECTED AT SCHUYLKILL RIVER QUALITY ASSESSMENT SITES

BED MATERIAL SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	SILVER, RECOV. FM BOTTOM MATERIAL (UG/G AS AG)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)
01470982 - CACOOSING CREEK NEAR READING, PA. (LAT 40 21 58 LONG 075 59 41)										
DEC , 1979 07...	1	<1	170	29	9.9	39	28	.0	17	1.6
401822075583700 - WYOMISSING CR AT SHILLINGTON (LAT 40 18 22 LONG 075 58 37)										
DEC , 1979 07...	0	0	140	28	4.6	33	89	.0	88	3.6
01471519 - WYOMISSING CRK AT MUSEUM RD., WEST READING, PA (LAT 40 19 37 LONG 075 56 58)										
DEC , 1979 06...	0	<1	120	28	5.9	34	23	.0	140	16
401925075553000 - SCHUYLKILL R AT SOUTH ST READING PA (LAT 40 19 25 LONG 075 55 30)										
DEC , 1979 06...	1	<1	690	55	5.4	60	320	.0	26	7.8
401727075564900 - ANGELICA CR NR SHILLINGTON (LAT 40 17 27 LONG 075 56 49)										
DEC , 1979 07...	1	0	120	31	.3	31	12	.0	5	3.2
01471540 - ANGELICA CREEK AT READING, PA (LAT 40 18 36 LONG 075 55 22)										
DEC , 1979 07...	1	<1	210	29	.6	30	59	.0	10	3.1
01471570 - SCHUYLKILL R AT RIDGEWOOD NEAR READING, PA. (LAT 40 18 08 LONG 075 54 21)										
DEC , 1979 06...	1	2	800	60	4.1	64	110	.0	25	2.0
401737075531400 - SCHUYLKILL R AT SEYFERT NR GIBRALTAR PA (LAT 40 17 37 LONG 075 53 14)										
NOV , 1979 15...	1	2	780	78	3.3	81	140	.0	12	.0
01471620 - ALLEGHENY CREEK AT GIBRALTAR, PA (LAT 40 17 06 LONG 075 52 24)										
DEC , 1979 07...	0	0	110	28	.2	28	9	.0	25	56
01471625 - SCHUYLKILL R NEAR LORANE, PA. (LAT 40 17 20 LONG 075 52 05)										
NOV , 1979 15...	1	2	580	74	.5	74	130	.0	24	.0

ANALYSES OF SAMPLES COLLECTED AT SCHUYLKILL RIVER QUALITY ASSESSMENT SITES

BED MATERIAL SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	METH- OXY- CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
01470982 - CACOOSING CREEK NEAR READING, PA. (LAT 40 21 58 LONG 075 59 41)									
DEC , 1979 07...	2.5	.7	1.0	.0	.0	.0	.0	.0	0
401822075583700 - WYOMISSING CR AT SHILLINGTON (LAT 40 18 22 LONG 075 58 37)									
DEC , 1979 07...	2.1	2.4	1.5	.0	.0	.0	.0	.0	0
01471519 - WYOMISSING CRK AT MUSEUM RD., WEST READING, PA (LAT 40 19 37 LONG 075 56 58)									
DEC , 1979 06...	17	14	.3	.0	.0	.0	.0	.0	0
401925075553000 - SCHUYLKILL R AT SOUTH ST READING PA (LAT 40 19 25 LONG 075 55 30)									
DEC , 1979 06...	11	8.9	1.5	.0	.0	.0	.0	.0	0
401727075564900 - ANGELICA CR NR SHILLINGTON (LAT 40 17 27 LONG 075 56 49)									
DEC , 1979 07...	1.9	6.5	.4	.0	.0	.0	.0	.0	0
01471540 - ANGELICA CREEK AT READING, PA (LAT 40 18 36 LONG 075 55 22)									
DEC , 1979 07...	.9	1.1	3.4	.0	.0	.0	.0	.0	0
01471570 - SCHUYLKILL R AT RIDGEWOOD NEAR READING, PA. (LAT 40 18 08 LONG 075 54 21)									
DEC , 1979 06...	4.8	3.3	1.5	.0	.0	.0	.0	.0	0
401737075531400 - SCHUYLKILL R AT SEYFERT NR GIBRALTAR PA (LAT 40 17 37 LONG 075 53 14)									
NOV , 1979 15...	10	3.1	.7	.0	.0	.0	.0	.0	0
01471620 - ALLEGHENY CREEK AT GIBRALTAR, PA (LAT 40 17 06 LONG 075 52 24)									
DEC , 1979 07...	6.2	9.0	1.0	.0	.0	.0	.0	.0	0
01471625 - SCHUYLKILL R NEAR LORANE, PA. (LAT 40 17 20 LONG 075 52 05)									
NOV , 1979 15...	4.7	4.4	.0	.0	.0	.0	.0	.0	0

ANALYSES OF SAMPLES COLLECTED AT SCHUYLKILL RIVER QUALITY ASSESSMENT SITES

BED MATERIAL SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ANTI-MONY, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BERYL-LIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)
01471650 - ANTIETAM CR AT LORANE, PA. (LAT 40 17 57 LONG 075 50 56)										
DEC , 1979										
07...	0900	1	0	6	<10	30	60	430	.00	30
401632075500100 - SCHUYLKILL R AT HEISTERS CR NR BIRDSBORO PA (LAT 40 16 32 LONG 075 50 01)										
NOV , 1979										
15...	1515	0	0	5	<10	110	230	330	.00	140
01471660 - SCHUYLKILL RIVER AT BIRDSBORO, PA. (LAT 40 16 05 LONG 075 48 32)										
NOV , 1979										
16...	0930	0	0	10	<10	130	280	400	.00	150
01471680 - SCHUYLKILL R AT MONOCACY STA NR BIRDSBORO, PA. (LAT 40 15 31 LONG 075 46 08)										
NOV , 1979										
16...	0855	0	0	10	<10	160	300	310	.00	160
401458075433100 - SCHUYLKILL R AT DOUGLASSVILLE PA (LAT 40 14 58 LONG 075 43 31)										
NOV , 1979										
16...	0750	0	0	5	<10	110	200	210	.00	110
01471780 - SCHUYLKILL RIVER AT STOWE NR POTTSTOWN, PA (LAT 40 13 10 LONG 075 41 28)										
NOV , 1979										
15...	1245	0	0	11	<10	110	210	270	.00	110
401657075412300 - MANATAWNY CR AT PINE FORGE, PA (LAT 40 16 57 LONG 075 41 23)										
NOV , 1979										
16...	0800	0	0	1	<10	20	20	60	.00	10
401733075405300 - IRONSTONE CR NR PINE FORGE (LAT 40 17 33 LONG 075 40 53)										
NOV , 1979										
16...	0840	0	0	1	<10	20	20	40	.00	10
01471990 - MANATAWNY CR AT POTTSTOWN, PA. (LAT 40 14 47 LONG 075 39 24)										
NOV , 1979										
15...	1100	0	0	2	<10	20	30	70	.00	20
401327075370000 - SCHUYLKILL R AT EAST COVENTRY NR POTTSTOWN PA (LAT 40 13 27 LONG 075 37 00)										
NOV , 1979										
15...	0830	0	1	5	<10	80	170	240	.00	100

ANALYSES OF SAMPLES COLLECTED AT SCHUYLKILL RIVER QUALITY ASSESSMENT SITES

BED MATERIAL SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	SILVER, RECOV. FM BOTTOM MATERIAL (UG/G AS AG)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)
01471650 - ANTIETAM CR AT LORANE, PA. (LAT 40 17 57 LONG 075 50 56)										
DEC , 1979 07...	0	<1	180	32	2.1	34	79	.0	59	5.8
401632075500100 - SCHUYLKILL R AT HEISTERS CR NR BIRDSBORO PA (LAT 40 16 32 LONG 075 50 01)										
NOV , 1979 15...	1	1	570	78	1.9	80	150	.0	23	7.5
01471660 - SCHUYLKILL RIVER AT BIRDSBORO, PA. (LAT 40 16 05 LONG 075 48 32)										
NOV , 1979 16...	0	2	650	54	4.3	58	170	.0	20	5.0
01471680 - SCHUYLKILL R AT MONOCACY STA NR BIRDSBORO, PA. (LAT 40 15 31 LONG 075 46 08)										
NOV , 1979 16...	1	3	520	50	1.8	52	140	.0	24	3.9
401458075433100 - SCHUYLKILL R AT DOUGLASSVILLE PA (LAT 40 14 58 LONG 075 43 31)										
NOV , 1979 16...	0	1	450	62	1.7	64	120	.0	13	.0
01471780 - SCHUYLKILL RIVER AT STOWE NR POTTSTOWN, PA (LAT 40 13 10 LONG 075 41 28)										
NOV , 1979 15...	1	1	480	60	1.0	61	210	.0	23	5.9
401657075412300 - MANATAWNY CR AT PINE FORGE, PA (LAT 40 16 57 LONG 075 41 23)										
NOV , 1979 16...	0	0	110	28	.5	28	31	.0	9	1.4
401733075405300 - IRONSTONE CR NR PINE FORGE (LAT 40 17 33 LONG 075 40 53)										
NOV , 1979 16...	0	0	70	13	.0	13	4	.0	2	6.2
01471990 - MANATAWNY CR AT POTTSTOWN, PA. (LAT 40 14 47 LONG 075 39 24)										
NOV , 1979 15...	0	0	110	30	.4	30	22	.0	16	6.9
401327075370000 - SCHUYLKILL R AT EAST COVENTRY NR POTTSTOWN PA (LAT 40 13 27 LONG 075 37 00)										
NOV , 1979 15...	1	<1	430	42	1.2	43	190	.0	30	11

ANALYSES OF SAMPLES COLLECTED AT SCHUYLKILL RIVER QUALITY ASSESSMENT SITES

BED MATERIAL SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	METH- OXY- CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
01471650 - ANTIETAM CR AT LORANE, PA. (LAT 40 17 57 LONG 075 50 56)									
DEC , 1979									
07...	5.1	18	2.1	.0	.0	.0	.0	.0	0
401632075500100 - SCHUYLKILL R AT HEISTERS CR NR BIRDSBORO PA (LAT 40 16 32 LONG 075 50 01)									
NOV , 1979									
15...	10	3.6	.9	.0	.0	.0	.0	.0	0
01471660 - SCHUYLKILL RIVER AT BIRDSBORO, PA. (LAT 40 16 05 LONG 075 48 32)									
NOV , 1979									
16...	6.0	8.8	.0	.0	.0	.0	.0	.0	0
01471680 - SCHUYLKILL R AT MONOCACY STA NR BIRDSBORO, PA. (LAT 40 15 31 LONG 075 46 08)									
NOV , 1979									
16...	14	4.4	1.0	.0	.0	.0	.0	.0	0
401458075433100 - SCHUYLKILL R AT DOUGLASSVILLE PA (LAT 40 14 58 LONG 075 43 31)									
NOV , 1979									
16...	7.2	4.0	.8	.0	.0	.0	.0	.0	0
01471780 - SCHUYLKILL RIVER AT STOWE NR POTTSTOWN, PA (LAT 40 13 10 LONG 075 41 28)									
NOV , 1979									
15...	6.9	4.5	1.4	.0	.0	.0	.0	.0	0
401657075412300 - MANATAWNY CR AT PINE FORGE, PA (LAT 40 16 57 LONG 075 41 23)									
NOV , 1979									
16...	2.0	3.5	.7	.0	.0	.0	.0	.0	0
401733075405300 - IRONSTONE CR NR PINE FORGE (LAT 40 17 33 LONG 075 40 53)									
NOV , 1979									
16...	3.7	3.9	1.0	.0	.0	.0	.0	.0	0
01471990 - MANATAWNY CR AT POTTSTOWN, PA. (LAT 40 14 47 LONG 075 39 24)									
NOV , 1979									
15...	8.3	1.6	2.4	.0	.0	.0	.0	.0	0
401327075370000 - SCHUYLKILL R AT EAST COVENTRY NR POTTSTOWN PA (LAT 40 13 27 LONG 075 37 00)									
NOV , 1979									
15...	24	8.3	3.4	.0	.0	.0	.0	.0	0

ANALYSES OF SAMPLES COLLECTED AT SCHUYLKILL RIVER QUALITY ASSESSMENT SITES

BED MATERIAL SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ANTI- MONY, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	BERYL- LIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI)
401404075353400 - SCHUYLKILL R AT SANATOGA STATION NR POTTSTOWN PA (LAT 40 14 04 LONG 075 35 34)										
NOV , 1979										
15...	0700	0	0	4	10	80	120	110	.00	70
01472040 - SCHUYLKILL R AT LINFIELD, PA. (LAT 40 12 18 LONG 075 34 52)										
NOV , 1979										
14...	1510	0	0	4	<10	80	170	260	.00	90
01472100 - PIGEON CREEK AT PARKER FORD, PA (LAT 40 11 48 LONG 075 35 13)										
NOV , 1979										
16...	1000	0	0	2	<10	60	20	40	.00	20
401234075333300 - SCHUYLKILL R BL VINCENT DAM AT LINFIELD PA (LAT 40 12 34 LONG 075 33 33)										
NOV , 1979										
14...	1600	0	0	5	20	90	210	210	.00	110
01472105 - SCHUYLKILL RIVER AT ROYERSFORD, PA (LAT 40 10 57 LONG 075 32 44)										
NOV , 1979										
14...	1315	--	0	55	<10	90	190	210	.00	110
01472120 - SCHUYLKILL R AT BL ROCK POOL NR PHOENIXVILLE PA. (LAT 40 08 46 LONG 075 30 33)										
NOV , 1979										
14...	1200	0	2	4	<10	70	140	210	.00	90
400802075323100 - FRENCH CR AT NUTT RD NR PHOENIXVILLE (LAT 40 08 02 LONG 075 32 31)										
DEC , 1979										
06...	0800	0	0	5	<10	20	30	80	.00	30
01472161 - FRENCH CREEK AT PHOENIXVILLE, PA. (LAT 40 08 07 LONG 075 31 05)										
DEC , 1979										
06...	0930	0	0	3	<10	50	100	470	.00	50
01472162 - SCHUYLKILL RIVER AT PHOENIXVILLE, PA (LAT 40 08 11 LONG 075 30 41)										
NOV , 1979										
14...	1000	0	1	4	<10	60	130	330	.00	80
400737075293500 - SCHUYLKILL R AT PT PROVIDENCE NR PHOENIXVILLE PA (LAT 40 07 37 LONG 075 29 35)										
NOV , 1979										
14...	0730	0	0	5	<10	80	170	190	.00	90

ANALYSES OF SAMPLES COLLECTED AT SCHUYLKILL RIVER QUALITY ASSESSMENT SITES

BED MATERIAL SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	SILVER, RECOV. FM BOTTOM MATERIAL (UG/G AS AG)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)
401404075353400 - SCHUYLKILL R AT SANATOGA STATION NR POTTSTOWN PA (LAT 40 14 04 LONG 075 35 34)										
NOV , 1979 15...	1	0	400	98	.3	98	51	.0	23	1.7
01472040 - SCHUYLKILL R AT LINFIELD, PA. (LAT 40 12 18 LONG 075 34 52)										
NOV , 1979 14...	0	0	480	40	.6	41	180	.0	33	8.6
01472100 - PIGEON CREEK AT PARKER FORD, PA (LAT 40 11 48 LONG 075 35 13)										
NOV , 1979 16...	0	0	70	16	.0	16	3	.0	4	.4
401234075333300 - SCHUYLKILL R BL VINCENT DAM AT LINFIELD PA (LAT 40 12 34 LONG 075 33 33)										
NOV , 1979 14...	0	0	580	74	.8	75	120	.0	16	3.0
01472105 - SCHUYLKILL RIVER AT ROYERSFORD, PA (LAT 40 10 57 LONG 075 32 44)										
NOV , 1979 14...	1	0	500	42	.8	43	190	.0	51	8.7
01472120 - SCHUYLKILL R AT BL ROCK POOL NR PHOENIXVILLE PA. (LAT 40 08 46 LONG 075 30 33)										
NOV , 1979 14...	0	0	430	36	1.1	37	230	.0	35	6.5
400802075323100 - FRENCH CR AT NUTT RD NR PHOENIXVILLE (LAT 40 08 02 LONG 075 32 31)										
DEC , 1979 06...	0	<1	130	25	1.4	26	10	.0	3	.0
01472161 - FRENCH CREEK AT PHOENIXVILLE, PA. (LAT 40 08 07 LONG 075 31 05)										
DEC , 1979 06...	0	1	780	33	1.9	35	68	.0	61	2.8
01472162 - SCHUYLKILL RIVER AT PHOENIXVILLE, PA (LAT 40 08 11 LONG 075 30 41)										
NOV , 1979 14...	0	0	530	41	1.7	43	190	.0	53	5.6
400737075293500 - SCHUYLKILL R AT PT PROVIDENCE NR PHOENIXVILLE PA (LAT 40 07 37 LONG 075 29 35)										
NOV , 1979 14...	0	0	570	42	1.0	43	220	.0	30	6.8

ANALYSES OF SAMPLES COLLECTED AT SCHUYLKILL RIVER QUALITY ASSESSMENT SITES

BED MATERIAL SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	METH- OXY- CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
401404075353400 - SCHUYLKILL R AT SANATOGA STATION NR POTTSTOWN PA (LAT 40 14 04 LONG 075 35 34)									
NOV , 1979									
15...	2.5	2.9	1.2	.0	.0	.0	.0	.0	0
01472040 - SCHUYLKILL R AT LINFIELD, PA. (LAT 40 12 18 LONG 075 34 52)									
NOV , 1979									
14...	21	4.4	7.9	.0	.0	.0	.0	.0	0
01472100 - PIGEON CREEK AT PARKER FORD, PA (LAT 40 11 48 LONG 075 35 13)									
NOV , 1979									
16...	.5	.0	1.1	.0	.0	.0	.0	.0	0
401234075333300 - SCHUYLKILL R BL VINCENT DAM AT LINFIELD PA (LAT 40 12 34 LONG 075 33 33)									
NOV , 1979									
14...	4.7	4.3	1.2	.0	.0	.0	.0	.0	0
01472105 - SCHUYLKILL RIVER AT ROYERSFORD, PA (LAT 40 10 57 LONG 075 32 44)									
NOV , 1979									
14...	12	4.2	1.3	.0	.0	.0	.0	.0	0
01472120 - SCHUYLKILL R AT BL ROCK POOL NR PHOENIXVILLE PA. (LAT 40 08 46 LONG 075 30 33)									
NOV , 1979									
14...	8.2	4.0	2.4	.0	.0	.0	.0	.0	0
400802075323100 - FRENCH CR AT NUTT RD NR PHOENIXVILLE (LAT 40 08 02 LONG 075 32 31)									
DEC , 1979									
06...	.0	.0	.9	.0	.0	.0	.0	.0	0
01472161 - FRENCH CREEK AT PHOENIXVILLE, PA. (LAT 40 08 07 LONG 075 31 05)									
DEC , 1979									
06...	3.0	3.2	3.5	.0	.0	.0	.0	.0	0
01472162 - SCHUYLKILL RIVER AT PHOENIXVILLE, PA (LAT 40 08 11 LONG 075 30 41)									
NOV , 1979									
14...	3.2	2.9	4.9	.0	.0	.0	.0	.0	0
400737075293500 - SCHUYLKILL R AT PT PROVIDENCE NR PHOENIXVILLE PA (LAT 40 07 37 LONG 075 29 35)									
NOV , 1979									
14...	11	4.8	2.8	.0	.0	.0	.0	.0	0

ANALYSES OF SAMPLES COLLECTED AT SCHUYLKILL RIVER QUALITY ASSESSMENT SITES

BED MATERIAL SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ANTI-MONY, TOTAL IN BOTTOM MATERIAL (UG/G)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)
400729075274000 - SCHUYLKILL R AT OAKS PA (LAT 40 07 29 LONG 075 27 40)										
NOV , 1979										
15...	1040	0	0	4	<10	70	100	120	.00	80
401920075282200 - UNAMI CR AT PERKIOMENVILLE PA (LAT 40 19 20 LONG 075 28 22)										
NOV , 1979										
15...	1630	0	0	2	<10	50	30	60	.00	40
401620075282400 - SWAMP CR NR ZIEGLERSVILLE PA (LAT 40 16 20 LONG 075 28 24)										
NOV , 1979										
15...	1515	1	0	2	<10	20	20	40	.00	20
401521075284200 - EAST BRANCH PERKIOMEN CR AT SCHWENKSVILLE PA (LAT 40 15 21 LONG 075 28 42)										
NOV , 1979										
15...	1430	0	0	2	<10	40	40	30	.00	30
01473070 - SKIPPACK CR AT SKIPPACK, PA. (LAT 40 13 45 LONG 075 22 52)										
NOV , 1979										
15...	1320	0	0	2	<10	10	20	40	.00	20
01473150 - PERKIOMEN CR AT OAKS, PA. (LAT 40 08 06 LONG 075 26 36)										
NOV , 1979										
15...	0935	0	0	2	<10	30	30	60	.00	20
400332075321500 - VALLEY CR NR DEVAULT PA (LAT 40 03 32 LONG 075 32 15)										
NOV , 1979										
13...	1130	0	0	2	<10	30	30	50	.00	30
01473180 - VALLEY CR AT VALLEY FORGE, PA. (LAT 40 06 00 LONG 075 27 47)										
NOV , 1979										
13...	1315	0	0	1	<10	20	20	50	.00	30
400609075274400 - SCHUYLKILL R AT VALLEY FORGE PA (LAT 40 06 09 LONG 075 27 44)										
NOV , 1979										
13...	1430	0	0	3	<10	30	40	90	.00	30
400622075242800 - TROUT CR NR VALLEY FORGE PA (LAT 40 06 22 LONG 075 24 28)										
NOV , 1979										
15...	0830	0	0	1	<10	20	30	100	.00	10

ANALYSES OF SAMPLES COLLECTED AT SCHUYLKILL RIVER QUALITY ASSESSMENT SITES

BED MATERIAL SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	SILVER, RECOV. FM BOTTOM MATERIAL (UG/G AS AG)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)
400729075274000 - SCHUYLKILL R AT OAKS PA (LAT 40 07 29 LONG 075 27 40)										
NOV , 1979 15...	0	0	400	44	.2	44	180	.0	27	3.9
401920075282200 - UNAMI CR AT PERKIOMENVILLE PA (LAT 40 19 20 LONG 075 28 22)										
NOV , 1979 15...	0	0	130	21	3.4	24	7	.0	3	.3
401620075282400 - SWAMP CR NR ZIEGLERSVILLE PA (LAT 40 16 20 LONG 075 28 24)										
NOV , 1979 15...	0	0	80	14	.0	14	39	.0	5	.8
401521075264200 - EAST BRANCH PERKIOMEN CR AT SCHWENKSVILLE PA (LAT 40 15 21 LONG 075 26 42)										
NOV , 1979 15...	0	<1	100	14	.0	14	5	.0	11	7.2
01473070 - SKIPPACK CR AT SKIPPACK, PA. (LAT 40 13 45 LONG 075 22 52)										
NOV , 1979 15...	0	<1	80	23	.1	23	9	.0	4	.0
01473150 - PERKIOMEN CR AT OAKS, PA. (LAT 40 08 06 LONG 075 26 36)										
NOV , 1979 15...	0	0	80	15	.3	15	10	.0	48	.0
400332075321500 - VALLEY CR NR DEVAULT PA (LAT 40 03 32 LONG 075 32 15)										
NOV , 1979 13...	0	0	140	15	7.0	22	47	.0	9	1.3
01473180 - VALLEY CR AT VALLEY FORGE, PA. (LAT 40 06 00 LONG 075 27 47)										
NOV , 1979 13...	0	0	80	12	5.4	17	110	.0	2	.0
400609075274400 - SCHUYLKILL R AT VALLEY FORGE PA (LAT 40 06 09 LONG 075 27 44)										
NOV , 1979 13...	0	0	170	25	4.6	30	200	.0	18	3.1
400622075242800 - TROUT CR NR VALLEY FORGE PA (LAT 40 06 22 LONG 075 24 28)										
NOV , 1979 15...	0	0	240	16	3.6	20	100	.0	34	.0

ANALYSES OF SAMPLES COLLECTED AT SCHUYLKILL RIVER QUALITY ASSESSMENT SITES

BED MATERIAL SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
400729075274000 - SCHUYLKILL R AT OAKS PA (LAT 40 07 29 LONG 075 27 40)									
NOV , 1979									
15...	14	7.1	1.9	.0	.0	.0	.0	.0	0
401920075282200 - UNAMI CR AT PERKIOMENVILLE PA (LAT 40 19 20 LONG 075 28 22)									
NOV , 1979									
15...	1.0	.4	.0	.0	.0	.0	.0	.0	0
401620075282400 - SWAMP CR NR ZIEGLERSVILLE PA (LAT 40 16 20 LONG 075 28 24)									
NOV , 1979									
15...	1.0	.8	.7	.0	.0	.0	.0	.0	0
401521075264200 - EAST BRANCH PERKIOMEN CR AT SCHWENKSVILLE PA (LAT 40 15 21 LONG 075 26 42)									
NOV , 1979									
15...	11	9.2	2.1	.0	.0	.0	.0	.0	0
01473070 - SKIPPACK CR AT SKIPPACK, PA. (LAT 40 13 45 LONG 075 22 52)									
NOV , 1979									
15...	2.2	.0	4.6	.0	.0	.4	.0	.0	0
01473150 - PERKIOMEN CR AT OAKS, PA. (LAT 40 08 06 LONG 075 26 36)									
NOV , 1979									
15...	2.5	.0	1.5	.0	.0	.0	.0	.0	0
400332075321500 - VALLEY CR NR DEVAULT PA (LAT 40 03 32 LONG 075 32 15)									
NOV , 1979									
13...	5.1	1.0	1.3	.0	.0	.0	.0	.0	0
01473180 - VALLEY CR AT VALLEY FORGE, PA. (LAT 40 06 00 LONG 075 27 47)									
NOV , 1979									
13...	1.1	2.2	.7	.0	.0	.0	.0	.0	0
400609075274400 - SCHUYLKILL R AT VALLEY FORGE PA (LAT 40 06 09 LONG 075 27 44)									
NOV , 1979									
13...	3.9	3.9	2.3	.0	.0	.0	.0	.0	0
400622075242800 - TROUT CR NR VALLEY FORGE PA (LAT 40 06 22 LONG 075 24 28)									
NOV , 1979									
15...	4.7	7.5	3.0	.0	.0	1.1	.0	.0	0

ANALYSES OF SAMPLES COLLECTED AT SCHUYLKILL RIVER QUALITY ASSESSMENT SITES

BED MATERIAL SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ANTI-MONY, TOTAL IN BOTTOM MATERIAL (UG/G)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)
400650075241700 - SCHUYLKILL R AT TROUT CR NR VALLEY FORGE PA (LAT 40 06 50 LONG 075 24 17)										
NOV , 1979 15...	0730	0	0	4	<10	50	80	110	.03	40
01473470 - STONY CREEK AT STERIGER STREET AT NORRISTOWN (LAT 40 07 38 LONG 075 20 43)										
NOV , 1979 14...	1515	0	0	2	<10	20	40	320	.00	20
01473500 - SCHUYLKILL R AT NORRISTOWN, PA. (LAT 40 06 40 LONG 075 20 50)										
NOV , 1979 14...	1630	0	0	4	<10	60	100	180	.00	70
400611075193300 - SCHUYLKILL R AT SWEDESBURG NR BRIDGEPORT, PA. (LAT 40 06 11 LONG 075 19 33)										
NOV , 1979 14...	0700	0	2	4	<10	60	120	210	.00	80
400440075190900 - SCHUYLKILL R AB PLYMOUTH DAM NR CONSHOHOCKEN (LAT 40 04 40 LONG 075 19 09)										
NOV , 1979 14...	0825	0	1	4	<10	50	90	180	.00	70
400424075190000 - GULPH CR AT WEST CONSHOHOCKEN PA (LAT 40 04 24 LONG 075 19 00)										
NOV , 1979 14...	0930	0	0	2	<10	40	60	150	.00	30
01473695 - PLYMOUTH CREEK NEAR CONSHOHOCKEN, PA (LAT 40 05 31 LONG 075 18 42)										
NOV , 1979 14...	1105	0	0	3	<10	20	30	140	.00	20
400426075170400 - SCHUYLKILL R AT SPRING MILL NR CONSHOHOCKEN PA (LAT 40 04 26 LONG 075 17 04)										
NOV , 1979 14...	1330	0	0	5	<10	50	120	210	.00	70
400230075145300 - SCHUYLKILL R AB FLAT ROCK DAM PHILA PA (LAT 40 02 30 LONG 075 14 53)										
NOV , 1979 14...	1230	0	0	4	<10	40	90	170	.00	40
01474010 - SCHUYLKILL R AT FALLS BRIDGE, PHILADELPHIA, PA. (LAT 40 01 00 LONG 075 11 52)										
NOV , 1979 13...	1500	0	0	3	<10	40	80	230	.00	30

ANALYSES OF SAMPLES COLLECTED AT SCHUYLKILL RIVER QUALITY ASSESSMENT SITES

BED MATERIAL SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	SILVER, RECOV. FM BOTTOM MATERIAL (UG/G AS AG)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)
400650075241700 - SCHUYLKILL R AT TROUT CR NR VALLEY FORGE PA (LAT 40 06 50 LONG 075 24 17)										
NOV , 1979 15...	0	0	680	27	.6	28	150	.0	23	3.0
01473470 - STONY CREEK AT STERIGER STREET AT NORRISTOWN (LAT 40 07 38 LONG 075 20 43)										
NOV , 1979 14...	0	<1	200	10	2.6	13	120	.0	100	7.0
01473500 - SCHUYLKILL R AT NORRISTOWN, PA. (LAT 40 06 40 LONG 075 20 50)										
NOV , 1979 14...	0	0	740	33	1.3	34	160	.0	31	5.8
400611075193300 - SCHUYLKILL R AT SWEDESBURG NR BRIDGEPORT, PA (LAT 40 06 11 LONG 075 19 33)										
NOV , 1979 14...	1.0	<1	1400	0.8	0.0	0.8	--	--	--	--
400440075190900 - SCHUYLKILL R AB PLYMOUTH DAM NR CONSHOHOCKEN (LAT 40 04 40 LONG 075 19 09)										
NOV , 1979 14...	1	<1	730	34	4.4	38	130	.0	36	5.5
400424075190000 - GULPH CR AT WEST CONSHOHOCKEN PA (LAT 40 04 24 LONG 075 19 00)										
NOV , 1979 14...	1	0	210	32	3.4	35	83	.0	89	9.2
01473695 - PLYMOUTH CREEK NEAR CONSHOHOCKEN, PA (LAT 40 05 31 LONG 075 18 42)										
NOV , 1979 14...	0	0	170	15	8.0	23	56	.0	24	5.4
400426075170400 - SCHUYLKILL R AT SPRING MILL NR CONSHOHOCKEN PA (LAT 40 04 26 LONG 075 17 04)										
NOV , 1979 14...	0	1	720	31	2.9	34	96	.0	28	3.6
400230075145300 - SCHUYLKILL R AB FLAT ROCK DAM PHILA PA (LAT 40 02 30 LONG 075 14 53)										
NOV , 1979 14...	0	<1	730	29	1.2	30	99	.0	24	4.5
01474010 - SCHUYLKILL R AT FALLS BRIDGE, PHILADELPHIA, PA. (LAT 40 01 00 LONG 075 11 52)										
NOV , 1979 3...	1	<1	400	29	3.0	32	68	.0	54	9.6

BED MATERIAL SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
400650075241700 - SCHUYLKILL R AT TROUT CR NR VALLEY FORGE PA (LAT 40 06 50 LONG 075 24 17)									
NOV , 1979									
15...	4.8	1.8	1.4	.0	.0	.0	.0	.0	0
01473470 - STONY CREEK AT STERIGER STREET AT NORRISTOWN (LAT 40 07 38 LONG 075 20 43)									
NOV , 1979									
14...	5.7	10	6.6	.0	.0	1.7	.0	.0	0
01473500 - SCHUYLKILL R AT NORRISTOWN, PA. (LAT 40 06 40 LONG 075 20 50)									
NOV , 1979									
14...	9.8	4.9	3.4	.0	.0	.0	.0	.0	0
400611075193300 - SCHUYLKILL R AT SWEDESBURG NR BRIDGEPORT, PA (LAT 40 06 11 LONG 075 19 33)									
NOV , 1979									
14...	--	--	--	--	--	--	--	--	--
400440075190900 - SCHUYLKILL R AB PLYMOUTH DAM NR CONSHOHOCKEN (LAT 40 04 40 LONG 075 19 09)									
NOV , 1979									
14...	20	15	2.0	.0	.0	.0	.0	.0	0
400424075190000 - GULPH CR AT WEST CONSHOHOCKEN PA (LAT 40 04 24 LONG 075 19 00)									
NOV , 1979									
14...	14	9.0	6.6	.0	.0	1.2	.0	.0	0
01473695 - PLYMOUTH CREEK NEAR CONSHOHOCKEN, PA (LAT 40 05 31 LONG 075 18 42)									
NOV , 1979									
14...	6.3	4.4	2.4	.0	.0	.0	.0	.0	0
400426075170400 - SCHUYLKILL R AT SPRING MILL NR CONSHOHOCKEN PA (LAT 40 04 26 LONG 075 17 04)									
NOV , 1979									
14...	9.0	2.6	2.7	.0	.0	.0	.0	.0	0
400230075145300 - SCHUYLKILL R AB FLAT ROCK DAM PHILA PA (LAT 40 02 30 LONG 075 14 53)									
NOV , 1979									
14...	8.1	1.5	2.4	.0	.0	.0	.0	.0	0
01474010 - SCHUYLKILL R AT FALLS BRIDGE, PHILADELPHIA, PA. (LAT 40 01 00 LONG 075 11 52)									
NOV , 1979									
13...	18	32	4.8	.0	.0	.5	.0	.0	0

BERKS COUNTY

402615075530501. Local number, BE 623.

LOCATION.--Lat 40°26'15", long 75°53'05", Hydrologic Unit 02040203, at Wesner Road, Blandon.
Owner: Maiden Creek Township Water Authority.

AQUIFER.--Dolomite of Leithsville Formation of Lower and Middle Cambrian age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in (20 cm), depth 385 ft (117 m), casing information not available.

DATUM.--Altitude of land-surface datum is 430 ft (131 m). Measuring point: Top of casing, 1.30 ft (40 cm) above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--January 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 116.56 ft (35.53 m) below land-surface datum, Mar. 20, 1979; lowest, 137.49 ft (41.91 m) below land-surface datum, Nov. 5, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	129.82	129.87	131.38	131.90	132.84	134.28	128.70	123.51	125.48	129.38	132.59	135.27
10	129.15	130.28	131.75	132.21	133.11	134.31	127.75	123.21	126.23	130.02	132.99	135.58
15	128.70	130.43	132.02	131.96	133.37	134.52	126.73	123.19	126.79	130.63	133.40	135.85
20	128.72	130.87	132.31	132.04	133.58	133.53	126.37	123.40	127.57	131.10	133.88	135.96
25	128.99	131.12	132.09	132.33	133.73	131.08	126.26	123.85	128.24	131.54	134.32	136.18
EOM	129.50	131.29	131.86	132.53	134.07	129.82	125.02	124.72	128.93	132.14	134.85	136.36

WTR YR 1980 HIGH 123.02 MAY 13 LOW 136.39 SEP 29

BUCKS COUNTY

402643075150501. Local number, BK 929.

LOCATION.--Lat 40°26'43", long 75°15'05", Hydrologic Unit 02040105, at Nockamixon State Park.
Owner: U.S. Geological Survey.

AQUIFER.--Shale of Brunswick Formation of Upper Triassic age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (15 cm), depth 116 ft (35.4 m), cased to 27 ft (8.2 m), open hole.

DATUM.--Altitude of land-surface datum is 490 ft (149 m). Measuring point: Top of plywood shelf, 1.30 ft (40 cm) above land-surface datum. Prior to Mar. 17, 1980, top of casing, 1.05 ft (32 cm) above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--November 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 40.11 ft (12.22 m) below land-surface datum, Apr. 15, 1980; lowest, 59.75 ft (18.21 m) below land-surface datum, Nov. 26, 1968.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	46.21	45.35	42.63	41.82	42.12	43.42	40.86	40.97	41.75	44.26	46.41	48.19
10	45.63	44.50	42.79	42.53	42.15	43.47	40.49	40.99	42.20	44.69	46.59	48.32
15	45.13	44.19	42.92	41.97	42.73	43.52	40.11	40.76	42.33	45.22	46.72	48.68
20	44.83	43.92	42.81	41.66	43.12	42.75	40.72	---	42.90	---	47.28	48.83
25	44.75	43.70	41.64	41.60	43.22	42.49	40.81	---	43.75	45.63	47.70	48.90
EOM	45.38	43.09	41.81	41.72	43.83	41.51	40.90	41.27	43.98	45.93	48.08	49.03

WTR YR 1980 HIGH 40.11 APR 15 LOW 49.09 SEP 29

CARBON COUNTY

410123075425401. Local number, CB 104.

LOCATION.--Lat 41°01'23", long 75°42'54", Hydrologic Unit 02040106, at Hickory Run State Park.
Owner: U.S. Geological Survey.

AQUIFER.--Shale of Lower Member of Mauch Chunk Formation of Upper Mississippian age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (15 cm), depth 125 ft (38.1 m), cased to 20 ft (6.1 m), open hole.

DATUM.--Altitude of land-surface datum is 1,305 ft (398 m). Measuring point: Top of plywood shelf, 3.12 ft (95 cm) above land-surface datum. Prior to May 28, 1980, top of casing, 3.00 ft (91 cm) above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--September 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 21.10 ft (6.43 m) below land-surface datum, Dec. 28, 1974; lowest, 84.47 ft (25.74 m) below land-surface datum, Sept. 30, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	24.85	41.30	34.68	39.99	55.26	68.57	28.60	42.08	52.79	---	76.80	81.56
10	27.61	39.41	40.25	44.39	58.11	70.02	29.47	44.94	56.10	---	77.71	82.21
15	33.27	41.46	44.67	45.42	60.55	71.19	28.37	43.74	59.01	---	78.54	82.85
20	39.10	43.70	46.08	46.37	62.91	---	32.06	42.35	61.70	---	79.32	83.38
25	43.43	46.21	46.75	48.68	65.12	---	37.75	45.15	64.13	---	80.08	83.92
EOM	45.89	32.14	35.84	52.11	66.80	27.75	41.05	49.19	66.20	75.73	80.89	84.47

WTR YR 1980 HIGH 24.06 OCT 6 LOW 84.47 SEP 30

CHESTER COUNTY

395450075485401. Local number, CH 10.

LOCATION.--Lat 39°54'50", long 75°48'54", Hydrologic Unit 02040205, at Route 841 and Route 82, Doe Run.
Owner: Robert J. Kleberg, Jr.

AQUIFER.--Cockeysville Marble of Paleozoic age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in (15 cm), depth 34 ft (10.4 m), casing information not available.

DATUM.--Altitude of land-surface datum is 300 ft (91 m). Measuring point: Top of casing, 1.00 ft (30 cm) above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--August 1951 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.28 ft (2.52 m) below land-surface datum, Mar. 30, 1958; lowest, 16.22 ft (4.94 m) below land-surface datum, Nov. 3, 1963.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.58	10.83	11.32	11.97	12.14	12.77	9.11	9.99	11.75	12.68	13.36	14.00
10	10.49	11.11	11.56	12.16	12.31	12.78	9.66	10.41	11.92	12.86	13.48	14.07
15	9.83	10.81	11.66	11.43	12.47	12.14	10.14	10.64	12.14	12.95	13.60	14.17
20	10.45	11.21	11.88	11.36	12.60	11.32	10.63	10.83	12.31	12.99	13.69	14.27
25	10.73	---	11.86	11.52	12.61	10.36	11.10	11.02	12.48	13.10	13.77	14.31
EOM	11.16	11.08	11.76	11.85	12.67	10.16	10.47	11.51	12.58	13.24	13.93	14.36

WTR YR 1980 HIGH 8.68 APR 2 LOW 14.36 SEP 30

DELAWARE COUNTY

395040075341801. Local number, DE 3.

LOCATION.--Lat 39°50'40", long 75°34'18", Hydrologic Unit 02040205, at Birmingham Township.
Owner: Mrs. Hope W. Ebert.
AQUIFER.--Gneiss of Wissahickon Formation (age uncertain, Lower Paleozoic to Precambrian).
WELL CHARACTERISTICS.--Dug unused water-table well, diameter 42 in (107 cm), depth 22 ft (6.7 m), cased with stone.
DATUM.--Altitude of land-surface datum is 280 ft (85 m). Measuring point: Top of concrete base, 1.80 ft (55 cm) above land-surface datum.
REMARKS.--None.
PERIOD OF RECORD.--June 1951 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.90 ft (2.41 m) below land-surface datum, Aug. 22, 1955; lowest measured, dry many times since 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 1	15.68	DEC 3	12.79	FEB 4	14.41	APR 7	11.14	JUNE 2	14.47	AUG 4	16.77
8	13.97	10	12.95	11	14.60	14	11.87	9	14.76	11	16.97
15	12.60	17	13.43	18	14.84	21	12.53	16	15.04	18	17.18
22	12.49	24	13.87	25	15.04	28	13.14	23	15.33	25	17.37
29	12.98	31	14.18	MAR 3	15.25	MAY 5	13.19	30	15.59	SEP 1	17.57
NOV 5	13.40	JAN 7	14.42	10	15.45	12	13.34	JULY 7	15.86	8	17.78
12	13.63	14	14.48	17	15.26	19	13.74	14	16.10	15	18.00
19	13.66	21	14.46	24	13.82	26	14.13	21	16.33	22	18.21
26	13.72	28	14.35	31	12.61			28	16.57	29	18.41

WTR YR 1980 HIGH 10.95 APR 5 LOW DRY SEP 30

LACKAWANNA COUNTY

411310075375501. Local number, LK 4.

LOCATION.--Lat 41°13'10", long 75°37'55", Hydrologic Unit 02040106, at Lackawanna State Forest.
Owner: Commonwealth of Pennsylvania.
AQUIFER.--Shale and sandstone of Catskill Formation of Upper Devonian age.
WELL CHARACTERISTICS.--Dug unused water-table well, diameter 36 in (91 cm), depth 10 ft (3.0 m).
DATUM.--Altitude of land-surface datum is 1,910 (582 m). Measuring point: Top of wooden cover, 0.40 ft (12 cm) above land-surface datum.
REMARKS.--None.
PERIOD OF RECORD.--June 1953 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.40 ft (43 cm) below land-surface datum, June 29, 1973; lowest measured, dry, Oct., Nov. 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	3.32	DEC 7	3.43	FEB 5	3.90	APR 10	2.08	JUNE 11	3.42	AUG 6	4.20
29	3.35	28	3.30	21	4.05	15	2.52	30	3.69	13	4.65
NOV 7	3.32	JAN 11	3.64	MAR 5	4.18	29	3.03	JULY 7	3.92	25	5.30
23	3.50	25	3.61	25	2.81	MAY 13	3.28	22	3.80	SEP 5	6.05
--	----	--	----	--	----	22	3.46	--	----	9	6.05
--	----	--	----	--	----	--	----	--	----	26	6.57

WTR YR 1980 HIGH 2.08 APR 10 LOW 6.57 SEP 26

LEBANON COUNTY

402207076180801. Local number, LB 372.

LOCATION.--Lat 40°22'07", long 76°18'08", Hydrologic Unit 02040203, at Myerstown.
Owner: Kohl Brothers, Inc.
AQUIFER.--Dolomite of Ontelaunee Formation of Middle Ordovician age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in (15 cm), depth 80 ft (24.4 m), casing information not available, open hole.
DATUM.--Altitude of land-surface datum is 444 ft (135 m). Measuring point: Top of casing, 3.50 ft (1.07 m) above land-surface datum.
REMARKS.--None.
PERIOD OF RECORD.--July 1973 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.02 ft (1.23 m) below land-surface datum, Jan. 27, 1976; lowest, 10.52 ft (3.21 m) below land-surface datum, Sept. 30, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.58	8.15	8.68	8.96	9.57	9.93	7.78	8.10	8.48	8.88	9.72	10.29
10	6.89	8.30	8.83	9.10	9.65	9.96	7.70	8.28	8.47	9.11	9.79	10.35
15	7.32	8.37	8.82	9.13	9.77	9.71	7.68	8.23	8.68	9.27	9.93	10.39
20	7.60	8.54	9.00	9.22	9.81	8.93	8.14	8.34	8.80	9.17	10.07	10.40
25	7.86	8.60	8.98	9.31	9.78	7.92	8.24	8.12	9.04	9.45	10.08	10.51
EOM	8.13	8.56	8.79	9.46	9.88	7.98	7.92	8.41	8.73	9.62	10.13	10.52

WTR YR 1980 HIGH 6.52 OCT 4 LOW 10.52 SEP 30

LEHIGH COUNTY

403429075392401. Local number, LE 644.

LOCATION.--Lat 40°34'29", long 75°39'24", Hydrologic Unit 02040106, at Haafsville.
Owner: Charles J. Haaf.
AQUIFER.--Beekmantown Group of Middle Ordovician age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 10 in (25 cm), depth 184 ft (56.1 m), cased to 63 ft (19.2 m), open hole.
DATUM.--Altitude of land-surface datum is 470 ft (143 m). Measuring point: Top of plywood cover, 1.45 ft (44 cm) above land-surface datum.
REMARKS.--Water-quality records for 1973-75 are available in files of district office.
PERIOD OF RECORD.--January 1971 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 36.65 ft (11.17 m) below land-surface datum, June 27, 1972; lowest, 93.42 ft (28.47 m) below land-surface datum, Feb. 6, 1971.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	57.88	56.83	57.74	58.03	61.69	---	58.26	53.79	56.25	60.82	66.73	71.94
10	56.21	57.08	57.85	58.60	62.24	---	57.19	54.02	56.70	61.95	67.58	72.52
15	55.40	57.47	58.59	58.80	63.15	---	56.02	54.08	57.18	62.86	68.58	73.18
20	55.70	57.72	58.97	59.22	63.85	---	54.63	54.38	58.38	63.49	69.35	74.02
25	55.97	57.84	58.70	60.08	64.25	61.82	55.12	54.77	59.29	64.79	70.43	74.62
EOM	56.57	57.55	57.70	60.89	64.67	60.44	54.45	55.91	60.20	65.88	71.03	74.90

WTR YR 1980 HIGH 53.79 MAY 5 LOW 74.99 SEP 29

LEHIGH COUNTY

403226075343001. Local number, LE 860.

LOCATION.--Lat 40°32'26", long 75°34'30", Hydrologic Unit 02040106, at Lower Macungie Township.
Owner: Paul Knepper.
AQUIFER.--Dolomite of Allentown Formation of Upper Cambrian age.
WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (15 cm), depth 100 ft (30.5 m), cased to 58 ft (17.7 m), open hole.
DATUM.--Altitude of land-surface datum is 358 ft (109 m). Measuring point: Top of casing, 2.00 ft (61 cm) above land-surface datum.
REMARKS.--None.
PERIOD OF RECORD.--June 1969 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.26 ft (8 cm) below land-surface datum, Jan. 27, 1978; lowest 10.46 ft (3.19 m) below land-surface datum, July 23, 1969.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.42	4.54	4.57	---	5.48	6.01	4.09	3.85	4.51	5.40	6.10	6.88
10	4.35	4.60	4.69	---	5.57	6.00	3.98	4.03	4.57	5.50	6.23	7.03
15	4.27	4.66	4.75	---	5.69	6.14	3.93	4.10	4.77	5.66	6.32	7.16
20	4.41	4.79	4.91	---	5.80	5.29	4.08	4.26	4.96	5.76	6.45	7.24
25	4.47	4.89	4.74	---	5.77	4.18	4.24	4.36	5.11	5.84	6.59	7.37
EOM	4.65	4.47	---	5.34	5.91	4.33	3.60	4.57	5.25	5.98	6.74	7.53

WTR YR 1980 HIGH 3.60 APR 30 LOW 7.53 SEP 30

MONROE COUNTY

411223075234901. Local number, MO 190.

LOCATION.--Lat 41°12'23", long 75°23'49", Hydrologic Unit 02040106, at Tobyhanna State Park.
Owner: U.S. Geological Survey.
AQUIFER.--Sandstone of Catskill Formation of Upper Devonian age.
WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (15 cm), depth 98 ft (29.9 m), cased to 59 ft (18.0 m), open hole.
DATUM.--Altitude of land-surface datum is 1,990 ft (607 m). Measuring point: Top of plywood shelf, 2.96 ft (90 cm) above land-surface datum. Prior to Mar. 28, 1980, top of plywood cover, 2.57 ft (78 cm) above land-surface datum.
REMARKS.--None.
PERIOD OF RECORD.--October 1967 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.01 ft (2.14 m) below land-surface datum, May 18, 1978; lowest, 16.14 ft (4.92 m) below land-surface datum, Sept. 30, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.76	8.53	8.96	9.81	11.36	12.72	8.24	8.56	---	12.66	---	---
10	8.15	9.05	9.55	10.30	11.64	12.51	7.73	9.26	---	12.78	---	---
15	8.73	9.16	9.72	10.02	11.92	12.70	7.71	9.15	---	12.89	---	---
20	9.29	9.62	9.92	10.21	12.18	11.83	8.38	9.59	---	13.27	---	---
25	9.29	9.86	9.75	10.60	12.33	9.80	9.05	10.10	---	---	---	---
EOM	9.59	8.46	9.30	10.94	12.57	8.47	7.80	---	12.39	---	15.16	16.14

WTR YR 1980 HIGH 7.71 APR 15 LOW 16.14 SEP 30

400808075210401. Local number, MG 225.

LOCATION.--Lat 40°08'08", long 75°21'04", Hydrologic Unit 02040203, at Willow and Locust Streets, Norristown. Owner: Norristown State Hospital.

AQUIFER.--Sandstone of Stockton Formation of Upper Triassic age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in (30 cm), depth 300 ft (91.4 m), casing information not available.

DATUM.--Altitude of land-surface datum is 165 ft (50 m). Measuring point: Top of casing, 0.75 ft (23 cm) above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--September 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.96 ft (3.65 m) below land-surface datum, Jan. 27, 1978; lowest, 60.25 ft (18.36 m) below land-surface datum, Nov. 5, 6, 1963.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.78	17.60	17.84	20.04	20.60	23.08	13.25	17.04	19.21	22.53	32.10	36.69
10	15.91	17.94	18.26	20.47	21.05	23.46	13.76	17.67	19.64	23.09	36.55	37.22
15	14.91	17.53	18.81	19.89	21.62	22.31	14.30	17.66	20.17	23.67	38.04	37.72
20	15.78	22.42	19.43	19.72	22.03	20.42	15.31	18.03	20.83	23.57	35.21	38.10
25	16.73	20.32	19.48	19.69	---	17.45	16.23	18.04	21.38	32.59	35.43	38.37
EOM	17.78	17.88	19.66	20.09	22.87	16.50	16.70	18.61	22.02	26.41	36.11	38.51

WTR YR 1980 HIGH 13.15 APR 3 LOW 38.71 AUG 17

MONTGOMERY COUNTY

401310075181702. Local number, MG 884.

LOCATION.--Lat 40°13'10", long 75°18'17", Hydrologic Unit 02040203, at Upper Gwyned Township, near West Point. Owner: Merck, Sharp, and Dohme, Inc.

AQUIFER.--Shale of Brunswick Formation of Upper Triassic age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in (30 cm) to 10 in (25 cm), depth 600 ft (183 m), casing information not available.

DATUM.--Altitude of land-surface datum is 351 ft (107 m). Measuring point: Top of casing, 1.30 ft (40 cm) above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--March 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 38.40 ft (11.70 m) below land-surface datum, June 30, 1972; lowest, 93.17 ft (28.40 m) below land-surface datum, Oct. 20, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	64.99	62.74	60.00	---	60.31	63.10	59.88	58.34	60.26	63.29	66.63	68.24
10	64.49	62.04	60.14	---	60.70	63.29	58.49	59.19	60.57	63.74	66.85	68.61
15	63.92	61.58	60.41	---	61.40	63.62	57.35	59.51	60.80	64.28	66.88	69.11
20	63.52	61.21	59.87	---	61.71	63.13	57.00	59.65	61.52	64.99	67.04	69.50
25	63.18	60.82	57.98	---	62.13	62.48	57.99	59.49	62.05	65.66	67.29	69.65
EOM	63.05	60.54	---	59.78	62.74	61.16	58.47	59.87	62.69	66.27	67.76	70.03

WTR YR 1980 HIGH 57.00 APR 20 LOW 70.05 SEP 29

NORTHAMPTON COUNTY

403618075203801. Local number, NP 85.

LOCATION.--Lat 40°36'18", long 75°20'38", Hydrologic Unit 02040106, at Bethlehem. Owner: City of Bethlehem.
AQUIFER.--Dolomite of Leithsville Formation of Lower and Middle Cambrian age.
WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 12 in (30 cm), depth 344 ft (105 m), cased to 73 ft (22.3 m), open hole.
DATUM.--Altitude of land-surface datum is 230 ft (70 m). Measuring point: Top of casing, 1.00 ft (30 cm) above land-surface datum.
REMARKS.--None.
PERIOD OF RECORD.--July 1969 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.33 ft (10 cm) below land-surface datum, Sept. 24, 1975; lowest, 3.99 ft (1.22 m) below land-surface datum, Feb. 19, 1971.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.87	3.00	3.18	3.27	3.44	3.48	2.11	2.94	3.21	3.46	3.50	3.67
10	2.87	3.17	3.23	3.31	3.43	3.40	2.00	3.07	2.97	3.47	3.57	3.70
15	---	3.13	3.14	3.20	3.46	3.40	2.20	2.93	3.17	3.53	3.53	3.63
20	---	3.28	3.26	3.22	3.49	2.75	2.68	3.12	3.26	3.51	3.60	3.20
25	---	3.30	2.64	3.30	3.42	2.43	2.94	3.17	3.39	3.46	3.64	3.59
EOM	3.28	3.00	3.16	3.40	3.50	2.71	2.57	3.32	3.40	3.47	3.69	3.62

WTR YR 1980 HIGH 1.94 MAR 22 LOW 3.72 SEP 3

PHILADELPHIA COUNTY

395342075102101. Local number, PH 12.

LOCATION.--Lat 39°53'42", long 75°10'21", Hydrologic Unit 02040202, at Barracks and East Fourth Streets, Philadelphia. Owner: U.S. Naval Base.
AQUIFER.--Middle Sand Member of Raritan Formation of Upper Cretaceous age.
WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 8 in (20 cm), depth 104 ft (31.7 m), cased to 94 ft (28.6 m), screened 94-104 ft (28.6-31.7 m).
DATUM.--Altitude of land-surface datum is 8.64 ft (2.63 m). Measuring point: Top of casing, 1.80 ft (55 cm) above land-surface datum.
REMARKS.--Mean daily fluctuation caused by tidal loading, 0.20 ft (6 cm).
PERIOD OF RECORD.--January 1952 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.34 ft (4.68 m) below land-surface datum, Jan. 25, 1979; lowest, 39.60 ft (12.07 m) below land-surface datum, July 20, 1955.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.96	18.74	19.13	19.16	20.19	19.96	19.71	18.90	19.06	18.98	19.13	19.78
10	18.35	18.48	19.57	19.92	---	20.13	19.31	19.21	18.65	18.85	19.28	19.54
15	18.60	18.63	19.53	19.49	20.09	20.57	19.13	19.15	18.73	19.13	19.40	19.43
20	18.50	19.01	19.60	19.49	---	20.19	19.61	18.84	18.94	19.42	19.58	19.35
25	18.34	19.02	18.74	19.69	---	19.88	19.34	18.61	19.28	19.52	19.67	19.06
EOM	18.64	19.14	19.35	---	20.48	19.53	19.00	19.00	19.20	19.49	19.67	18.91

WTR YR 1980 HIGH 17.90 OCT 2 LOW 20.75 MAR 16

SCHUYLKILL COUNTY

404708076070701. Local number, SC 296.

LOCATION.--Lat 40°47'08", long 76°07'07", Hydrologic Unit 02040203, at Locust Lake State Park.
Owner: U.S. Geological Survey.
AQUIFER.--Mauch Chunk Formation of Lower Pennsylvanian age.
WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (15 cm), depth 242 ft (73.8 m), cased to 40 ft (12.2 m), open hole.
DATUM.--Altitude of land-surface datum is 1,290 ft (393 m). Measuring point: Top of plywood shelf, 2.78 ft (85 cm) above land-surface datum. Prior to June 26, 1980, top of casing, 2.30 ft (70 cm) above land-surface datum.
REMARKS.--None.
PERIOD OF RECORD.--July 1975 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 33.16 ft (10.11 m) below land-surface datum, Mar. 28, 1978; lowest, 54.60 ft (16.64 m) below land-surface datum, Sept. 16, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	42.09	43.04	43.61	48.29	50.50	39.39	41.97	47.51	50.53	51.73	53.33
10	---	42.34	45.59	45.98	48.79	50.24	38.72	44.31	48.02	50.82	52.13	53.52
15	---	44.39	46.81	45.96	49.28	50.87	38.19	42.86	48.64	51.18	52.35	53.80
20	---	45.95	47.69	46.11	49.72	44.87	39.73	43.13	49.11	51.54	52.54	54.00
25	45.07	46.80	45.92	46.60	49.58	---	43.16	44.94	49.63	51.21	52.85	54.18
EOM	45.70	41.70	40.86	47.81	50.14	38.45	41.92	46.62	50.05	51.79	53.05	54.38

WTR YR 1980 HIGH 37.24 MAR 27 LOW 54.38 SEP 30

WAYNE COUNTY

414333075153201. Local number, WN 64.

LOCATION.--Lat 41°43'33", long 75°15'32", Hydrologic Unit 02040103, at State Game Land Number 159.
Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of Glacial Outwash of Quaternary age.
WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (15 cm), depth 52 ft (15.8 m), cased to 52 ft (15.8 m), open end.
DATUM.--Altitude of land-surface datum is 1,350 ft (412 m). Measuring point: Top of plywood shelf, 2.63 ft (80 cm) above land-surface datum. Prior to Apr. 30, 1980, top of plywood cover, 2.57 ft (78 cm) above land-surface datum.
REMARKS.--None.
PERIOD OF RECORD.--October 1967 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.88 ft (2.40) below land-surface datum, Nov. 17, 1972; lowest, 32.59 ft (9.93 m) below land-surface datum, Sept. 29, 30, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	30.95	28.48	27.48	28.27	29.78	31.06	28.61	27.33	29.83	31.09	31.73	32.21
10	30.28	28.14	28.04	28.71	30.11	31.04	27.97	27.96	30.14	31.19	31.83	32.34
15	29.89	28.12	28.40	28.91	30.37	31.15	27.50	28.19	30.42	31.36	31.93	32.45
20	29.82	28.33	28.64	28.96	30.60	30.94	27.78	28.29	30.68	31.49	32.05	32.49
25	29.68	28.46	28.60	29.10	30.74	30.27	28.21	28.69	30.94	31.57	32.17	32.56
EOM	29.28	27.40	28.02	29.43	30.90	29.23	27.60	29.44	31.02	31.69	32.12	32.59

WTR YR 1980 HIGH 27.28 MAY 4 LOW 32.59 SEP 29 AND OTHERS

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FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	2.54×10^{1}	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^{0}	kilometers (km)
	Area	
acres	4.047×10^{3}	square meters (m^2)
	4.047×10^{-1}	square hectometers (hm^2)
	4.047×10^{-3}	square kilometers (km^2)
square miles (mi^2)	2.590×10^{0}	square kilometers (km^2)
	Volume	
gallons (gal)	3.785×10^{0}	liters (L)
	3.785×10^{0}	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons	3.785×10^{3}	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	2.832×10^{1}	cubic decimeters (dm^3)
	2.832×10^{-2}	cubic meters (m^3)
cfs-days	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	2.832×10^{1}	liters per second (L/s)
	2.832×10^{1}	cubic decimeters per second (dm^3/s)
	2.832×10^{-2}	cubic meters per second (m^3/s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day	4.381×10^{1}	cubic decimeters per second (dm^3/s)
	4.381×10^{-2}	cubic meters per second (m^3/s)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons

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